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EARLY MAN IN PORTSMOUTH AND SOUTH-EAST HAMPSHIRE

David J. Rudkin, BA, AMA

Introduction

The 'Early Man' of the title refers to human activity in the 'Prehistoric' Period, the time prior to written human records. In Britain this is until the time of the Claudian invasion of AD 43 which brought to an end the British Iron Age. Due to the absence of documentary evidence all information has to be gleaned from the remains; the pot-sherds, bones, seeds or post holes, that man has left behind him. This material has come to light either as casual finds or as a result of scientific survey and archaeological excavations.

The area under consideration is part of south-east Hampshire approximately within a twelve mile radius of Portsmouth; from the river Hamble to the west, Bishops Waltham and Petersfield to the north and the Sussex border to the east. This reflects the traditional collecting area of the Archaeological Department of Portsmouth City Museum and much of the material referred to in the text is represented in their collections.[1] This is also a useful area to consider in geological terms as it encompasses the chalk downland; the clay, sands and gravels of the Tertiary beds between the South Downs and Portsdown, and the brick-earths and plateau gravels of the littoral. This variety of geology produced differing vegetational zones and so directly influenced the activities and the settlement pattern of early man. The presence of rivers, e.g. the Meon and Wallington, and the harbours during the later stages would also have had a similar effect.

The first humans to arrive in the area did so in a period of major climatic fluctuation. During the Pleistocene period, Britain along with Continental Europe, to which it was physically attached, was subjected to a series of glaciations or Ice Ages. For present purposes we need only consider the last three, starting perhaps around 350,000 years ago; the Anglian, Wolstonian and Devensian with the intervening warmer interglacial phases; the Hoxnian and Ipswichian. During the coldest period Britain would have been unhabitable and in the Anglian glaciation the ice sheets probably reached as far south as the Thames Valley, although the extent of the various ice sheets is still disputed. In the intervening warm interglacials the temperatures were probably as high as today as shown by pollen and faunal evidence found in deposits of those periods. However, even during the glaciations it was not continuously cold and there were shorter, warm, 'interstadial' periods which would allow human occupation. The last glaciation ended around 8,300 BC although it is suggested that we are merely in an interglacial period today.

The Palaeolithic Period (Old Stone Age)

It is impossible to be exactly certain when man first appeared in the Portsmouth area. It is suggested that there were hand axe making groups in Britain as early as one of the interstadials of the Anglian glaciation.[2] If they were in the Portsmouth region then they have certainly not left much evidence of their visit, as none of their thick, heavy coarsely made hand axes have been found locally. The first evidence comes from the earlier part of the succeeding Hoxnian interglacial. At Rainbow Bar, Fareham,[3](1) flintwork has been found which has been suggested to be Clactonian,[4] a flint technology named after the material from the type site of Clacton, Essex.

This consists of very coarse flakes and cores. The former have been struck from the parent flint core using another stone, either as a hammer or as an anvil. Such a technique produces a characteristic flake with a large 'striking' platform where the flint was struck and a very wide angle between this platform and the back of the flake where it breaks away from the parent core. The cores themselves are approximately biconical with large flake scars. Initially cores were seen purely as the waste material but now they are recognised as tools in their own right. These are simple chopping tools and were found in large quantities at Rainbow Bar. A search for parallels for this material leads one to the earliest pebble and chopping tools of East Africa and the chopper tool industries of such sites as Choukoutien in China. Sites producing similar material have now been found closer to hand in Europe e.g. Vertesszöllös, Hungary.[5]

The material from Rainbow Bar is quite badly rolled due to it being submerged beneath the sea twice daily and although it illustrates the range of material in a Clactonian industry it is unlikely that it will provide any further information of an environmental nature. A similar problem prevails with the later Acheulean hand axes that have appeared in large quantities along the northern shore of Southampton Water from Warsash to Hill Head and to a lesser extent along the whole of the north side of the Solent. Local museums, especially Portsmouth Museum, hold large collections of these hand axes from the Warsash area. The majority were found in the late nineteenth and early twentieth century, when gravel was being won by hand. They would be very obvious to the gravel diggers and there was a ready market for them. A closer examination will show that many of them are in a rolled condition, with their edges blunted, obviously representing the 'sweepings up' of the Old Solent River. Some sharper examples do exist suggesting that they were dropped nearer to their find spot but it is unlikely that the working or occupation sites will be found in these gravels and if

they are, then it would be purely fortuitously. These tools are no longer being found in the same quantities due to the mechanisation of gravel quarrying industry. What this material does tell us, however, is that a new flint technology was in existence by this time which was totally different from the Clactonian material. The most prolific tool from the Warsash area is the pointed hand axe although cleavers and ovate forms do occur. From sites elsewhere in Britain, such as Hoxne and Swanscombe, Kent it is possible to propose that these hand axe using groups were later than the Clactonian groups. At Swanscombe the two industries are mutually exclusive with the Clactonian in the lower deposits and hand axes in the upper. This has been repeated elsewhere. In addition at Clacton, Essex, although a large amount of Clactonian tools were found there were no hand axes. As these deposits represent the material washed down the Thames river system it would strongly suggest that the hand axes could not have been present at that time or they would surely have been encountered at Clacton. The evidence from pollen collected from both Clactonian and Acheulean sites would suggest that the former were present in the earlier part of the Hoxne interglacial and the Acheulean in the later part. It is also possible that the different shapes of the Acheulean hand axes represent a chronological difference although evidence for this is not great.

It could alternatively be argued that the different shapes were for different functions but contemporary. The quality of the information on the material from the Solent gravels is not good enough to throw light on this argument as little information on their original context exists. Not all local hand axes come from the littoral, some having been found inland, on Portsdown, on the Tertiary beds and on the South Downs proper, with one example coming from the summit of Butser Hill (2). There is no reason, however, to consider these as other than casual losses, on hunting forays for example. There is one major exception to the rather random nature of these Lower Palaeolithic finds and that is the site of Red Barns, Portchester[6] (3). Thanks to the sharp eyesight of an archaeologist from Fareham, Mr. J. C. Draper, who has been responsible for the original discovery of many of the flint scatters in the area, an extremely important Lower Palaeolithic flint working site was brought to light. It consisted of a flint working floor covered in waste flakes, broken hand axes, scrapers and hammer stones. (Pl. 1) The sharpness of the tools and flakes showed that the material had not been disturbed since the site went out of use, probably some 150,000 years ago. Regrettably, as is usual, little organic material survived: only two pieces of horse bone, so it cannot add a great deal to the understanding of the economy of the period. The site owed its remarkable preservation to a layer of 'calcrete', a concreted chalk mud which had slid down over the site and sealed it. Over this had slid more deposits of Coombe Rock, a mixture of chalk and brickearth, presumably due to the freezing and thawing conditions during the Wolstonian glaciation.

Developments in flint technology were taking place, albeit extremely slowly and during the Wolstonian period the Levallois technique of tool production appears in Britain. This was the concentration on the production of flint flakes of carefully controlled thickness and shape and was to have considerable influence on future flint tools. The advance came by the careful preparation of the flint core prior to the removal of the flake and this considerably controlled the shape of the flake when it was struck. These prepared cores are often fairly flat on one surface and domed on the other, thus inviting the name of 'Tortoise' cores. They also normally have a flake scar on the underside where the flake tool has been removed. Due to the pre-working the striking platform on the flake tool frequently shows facets where other flakes have been removed in the preparation and this is the hallmark of a Levallois flake. Such flakes and Tortoise cores have been found in the gravel pits at Hook (4). Evidence from other British find spots suggest that this technology may have been a development of the Acheulean groups.[7]

In this area there is a hiatus before occupation is seen again, at the end of the ultimate or Devensian glaciation. This occupation is likely to have been ephemeral and at a time when conditions were improving at the end of the last glaciation. However, the evidence is extremely scanty. It consists of about half a dozen blades from Long Island (5) at the northern end of Langstone Harbour.[8] An end scraper on a long blade from Bakers Island (6) is probably also part of this group. The blade tools comprise a burin or graver, scrapers, shouldered points and backed blades. Their closest parallels in Britain are from another south coast open air site, Hengistbury Head,[9] but the presence of tanged points distinguishes them from the Late Upper Palaeolithic material found in cave sites. Dating this occupation is therefore very difficult as there are no radio carbon dates for any of the Upper Palaeolithic open air sites in Britain. Similarity between this material and that of North Western European industries would suggest a late phase of the last glaciation. An exception, however, is part of a 'Cheddarian point': a blade with blunting down one side producing a point at each end, which was found on the Wicor shore, Fareham[10] (7). This is a type of fossil of one phase of the Cresswellian industries found in British cave sites and at Kents Cavern, Torquay, where radio carbon dates range from 12,000 to 10,000 BC. Unfortunately the tools from Langstone Harbour and Wicor were found no longer in situ so one can say little more than that they

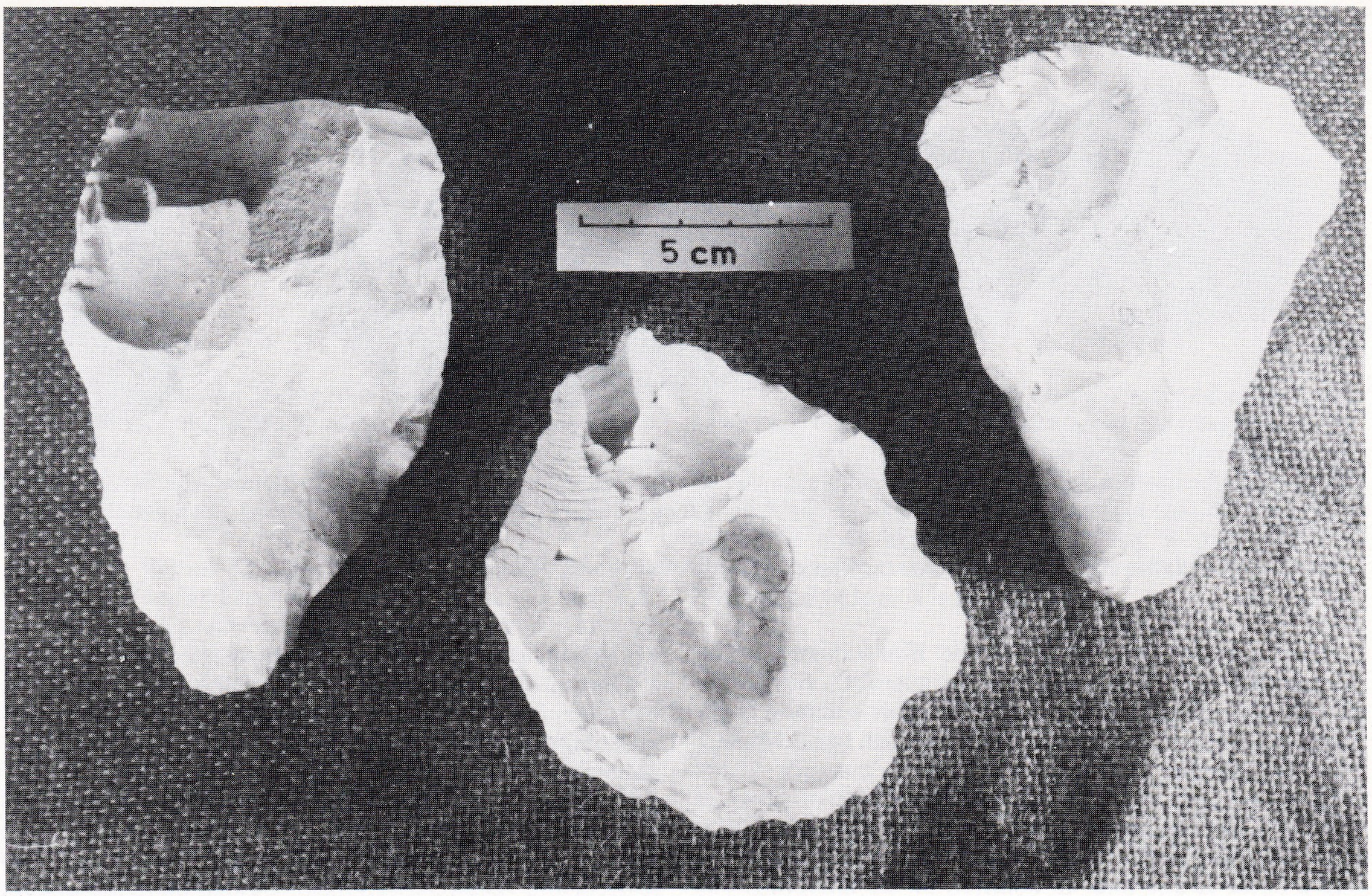

Plate 1: Lower Palaeolithic hand axes and scraper from Red Barns, Portchester.

represented the presence of Upper Palaeolithic hunters. One can only surmise that they were exploiting both land and water resources, although it should be borne in mind that during a glaciation the sea level would be considerably lower due to water being locked up in the ice sheet. The Harbours one sees today are really drowned river valleys.

The Mesolithic Period (Middle Stone Age)

The boundary between the Palaeolithic and Mesolithic (Middle Stone Age) has been fixed to coincide with the end of the last glaciation which has been dated to 8,300 BC. The retreat of these ice sheets was accompanied by an increase in both temperature and precipitation which inevitably had an effect on the vegetational cover. An analysis of pollen shows a change from park tundra to birch and pine forests, then to a mixture of mainly hazel with some birch and pine until by about 6,500 BC the true oak mixed forest of alder, elm, lime and oak was taking over. Such dramatic vegetational changes also led directly to a change of fauna. The large herds of reindeer, bison and horse together with the mammoth which had been exploited for food in the Palaeolithic, all disappeared with the ice sheets. They were replaced by forest loving fauna such as boar, aurochs, red and roe deer and elk. As forest supports smaller animal populations than an open environment there would also be less to hunt than in the preceding Palaeolithic. Thus hunting methods had to change to cope with the changed situation. Large hunting groups were no longer needed as deer congregate in smaller herds, and it is likely that smaller social groups developed to hunt them. With an overall decrease in meat supply one can also assume a move to a greater exploitation of plant foods which unfortunately leaves little trace in the archaeological record. A similar increase in the exploitation of sea food resources, both fish and shell fish can, however, be recognised on some sites. The evidence would nevertheless suggest that there was a considerable increase in population. A survey recently carried out in England and Wales[11] indicates that there are 126 Upper Palaeolithic sites known but approximately 5,000 Mesolithic ones. Admittedly there are biasing factors involved here such as differential preservation of sites etc., but still the trend is obvious. Regrettably, of this large number of sites, some of which admittedly may represent no more than casual losses of tools during the Mesolithic period, only a handful have been adequately excavated and regrettably only a few have organic material preserved. Thus for an understanding of the Mesolithic population in Britain one is left with little more than their lithic industries. Nevertheless a study of the component flint types, in conjunction with what few radio carbon dates are available, has made it possible to divide the Mesolithic of Britain as a whole into two parts, and in the south-east into three. The basic twofold division is first an 'Earlier Mesolithic' once called Maglemosian due to its obvious close affinities to similar material in Denmark, second a 'Later Mesolithic' once classed as Sauveterrian after material from a type site in south-west France but now seen to be no more closely related to this than other Western European sites.

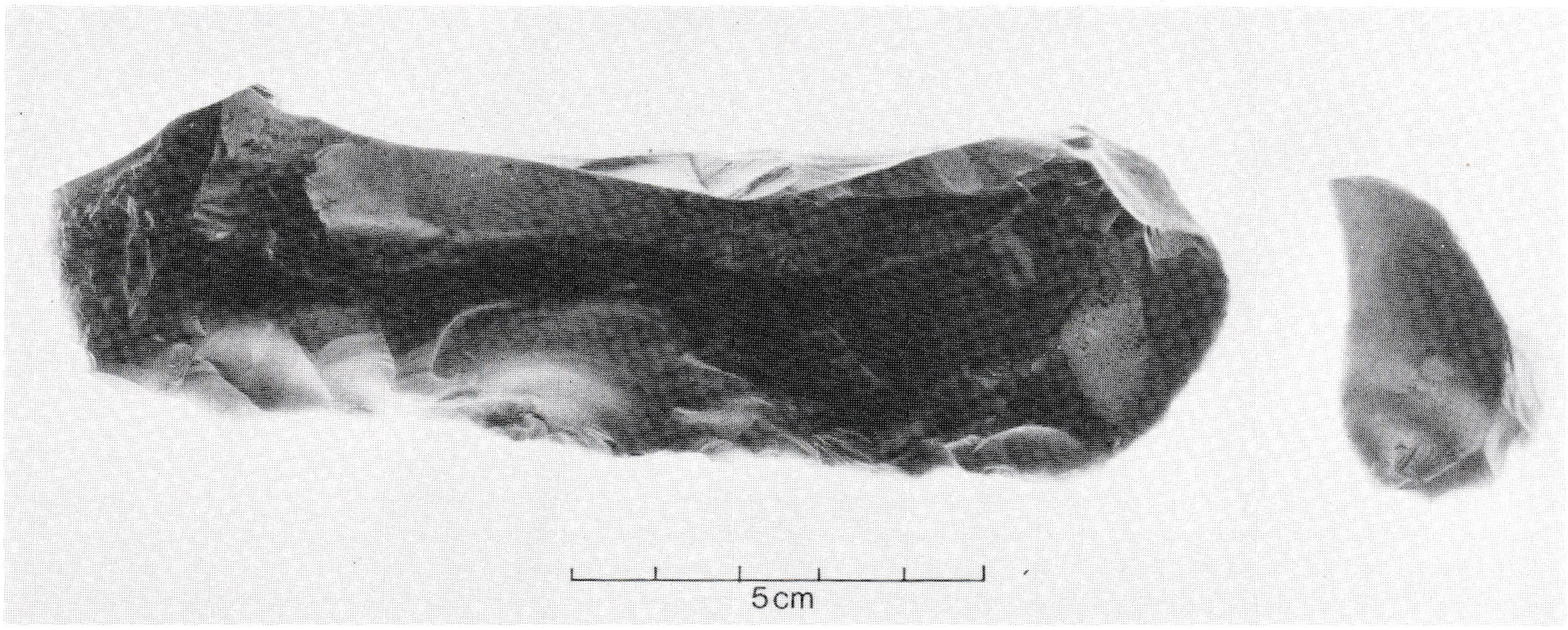

Plate 2: Mesolithic core-axe with a transversely struck axe sharpening flake.

In essence the 'Earlier Mesolithic' flint industry can be recognised by a type of fairly large microlith, often over 2.5cm long and of simple form. The most common is the obliquely blunted point, a small blade which has deliberate blunting running diagonally across from one side to the other forming a point. Triangular microliths of isosceles form are also common as are the 'backed blades' where there has been deliberate blunting all down one edge forming a point at one end. In addition to the microliths one finds the cores from which the microlith blades have been removed and also micro-burins discarded in the production of the microliths. Larger implements are also found such as convex end scrapers, gravers, saws, blades and core tools such as core-axes or adzes (Pl. 2). These could be resharpened by a transverse blow across the worn cutting edge, which removed a flake and left a new sharp edge. Such axe sharpening flakes are often found. Finally there are the heavy duty picks, often called 'Thames picks' which are normally fairly crudely made although more sophisticated double ended variants do exist, as for example, that from Shedfield[12] (8) (Pl. 3).

By contrast the Later 'Mesolithic' flint industry, which was probably under way by 6,500 BC concentrated on the production of a wide range of distinctive geometrically shaped microliths which on average were smaller than those of the preceding 'Earlier Mesolithic', most now being less than 2.5cm long and some of them minute. The main forms are now scalene triangles, i.e. with sides of unequal length, rods, crescents and trapezoids. As microliths have been seen to be the armaments for arrows, then this change of microlith form presumably is a reflection of a development in arrow manufacture. In this context it has been suggested that the similarity between British Later Mesolithic and that of France, Belgium and Holland, may represent no more than a common development of projectile points to deal with common changes in the environment.[13] In addition to the microlith forms, the British Later Mesolithic sites produce gravers and end scrapers as before with axes in the south but only rarely in the North and West.

In the south-east of England concentrated in the Weald is an industry apparently contemporary with the 'Later Mesolithic' but possibly starting some 500 years earlier[14] which does contain axes. In many respects it appears to be a mixture of Earlier and Later Mesolithic types. It does, however, have its own characteristics such as the pointed microliths with hollow retouched bases known as 'Horsham points'.

Now that the background has been set what can be said about the Mesolithic in the Portsmouth area? in fact, not a great deal. As in the rest of Britain one has solely flint scatters and isolated find spots, of which there are at least 86 recorded in the area under consideration. Of these sites only four have been excavated, all under rescue conditions. In addition only some of the known flint scatters contain enough diagnostic flints to enable them to be categorised as 'Earlier', 'Later' or 'Horsham'. Nevertheless 'Earlier Mesolithic' material has been recognised on the edge of our area at Petersfield Heath, (9) Wallington (10) and Shedfield (11).

The site at Wallington was located when the Wallington river was realigned to run alongside the Wallington Shore Road. Mesolithic flints were collected from the upcast and also the newly exposed banks. One of the artifacts was a small flake axe of Maglemosian form.[15] More recently a series of three superimposed hearths set in a saucer-like depression have also been located in the river bank in the same area. Flint waste flakes were stratified between the hearths and it seems probable that they also relate to the Mesolithic material. Unfortunately due to the nature of the retrieval of the material it is not possible to say whether one is dealing with one or a cluster of sites or how the features and artifacts relate together. One exciting thought is that if the bulk of the material has not been destroyed by the river realignment, as is quite possible, then the very nature of the waterlogged site means that preservation of organic material is a distinct possibility, a feature noticeably lacking on most Mesolithic sites.

The site of Sandy Lane, Shedfield [16] was located in 1951 through the fortuitous find of a fine flint pick (Pl 3). This was 31cm long, had a rhombic cross section and tapered down to a point at either end with the upper edge more markedly curved than the lower. Undoubtedly it would originally have been mounted into a wooden haft in which condition it would have resembled and worked like a modern steel pick. This find led to a closer search of the

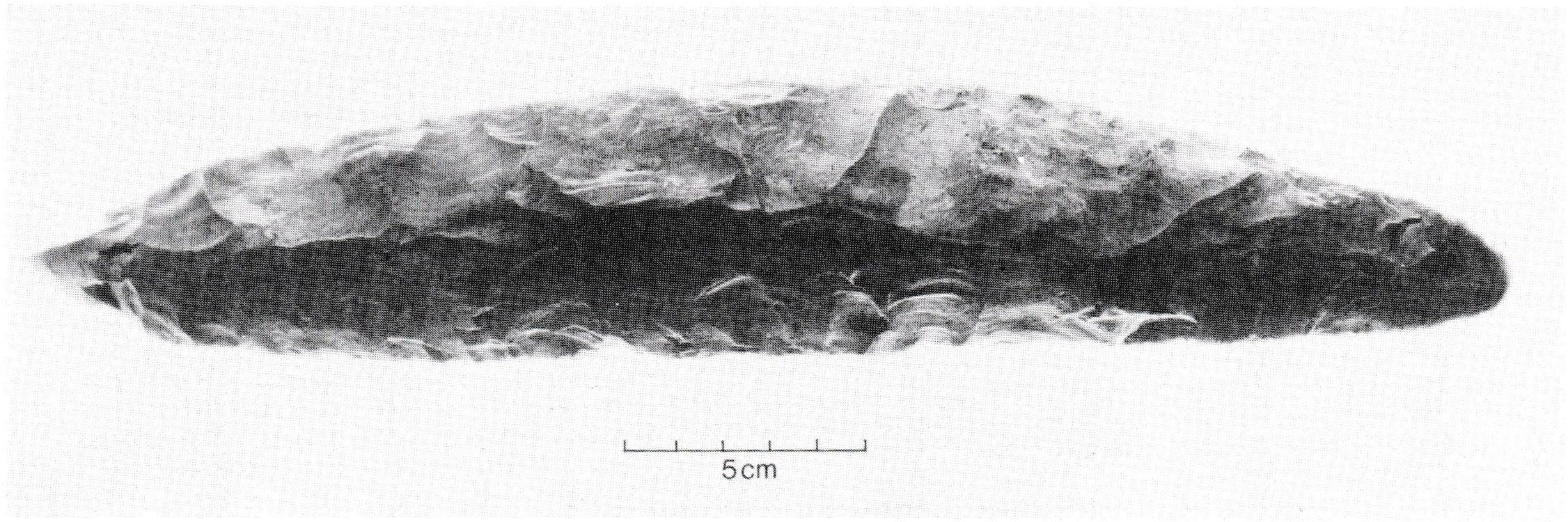

Plate 3: Mesolithic double-ended flint pick from Sandy Lane, Shedfield.

area and it was discovered that the surface stripping of overburden from sand beneath, prior to the latter's extraction had removed a Mesolithic flint working site. Much flintwork was recovered from the overburden heaps including eight microliths. Further sections were dug to ascertain the limits of the site which probably extended for some 70m. It also produced further microliths all of early form. One extremely interesting item was an axe sharpening flake made of Broom chert[17] which would indicate quite long distance movement of material, if not people. This is reinforced by the finding of a microburin of Portland chert on Windmill Hill, Chalton[18] (12).

It is probably true to say that the vast majority of the Mesolithic sites known in this area were first discovered by Mr. J. C. Draper of Fareham during the extensive fieldwork he has carried out. In his collections are hollow based points from both Butser Hill (13) and Salt Hill[19] (14), but this is perhaps too tenuous evidence to allow their classification as 'Horsham' sites as similar hollow based points have been found as far away as the Isle of Man.[20]

Later Mesolithic material has been identified from sites on the Clay with Flints which still overlies some of the chalk downs, and also, washed out from the brickearth shores of the islands at the north end of Langstone Harbour. A limited amount of excavation has also been carried out on later Mesolithic sites. In 1970 levelling of a hillside to produce school playing fields at Wakeford's Copse[21] (15) revealed a series of twenty or more Mesolithic pits on the summit and in a hollow on the eastern slope of the hill. The latter group of seven pits appeared to cluster around a working floor on which lay two core axes, a pebble rubber and a quantity of flint waste. Of these pits four had stake holes adjacent to the pit edge. These pits have been seen as the remains of temporary shelters possibly protected by branches and turfs, if only on the southern and western sides. None of the pits with associated stake holes contained any traces of hearths which is possibly not surprising due to their relatively small size the largest being no more than 2m by 1m. This might suggest that they were designed purely for summer occupation. One of the huts nearer the crest of the hill did contain a hearth, it was larger and bore no signs of stake holes around it. The hearth provided material for a radio carbon determination of 3,730 ±120 BC which ties in well with the tool types found in that particular pit which included rod microliths.

A group of hollows was excavated at Rowlands Castle (16) in 1970 which produced microlithic material but their true nature is not entirely clear.

In 1972 motorway construction near Fort Wallington (17) led to the discovery of a Late Mesolithic flint working site.[22] In addition in an area containing core axe roughouts and flakes there were also some fifty solution pipes which contained mesolithic artifacts up to 5m below the surface. There was no evidence of these pipes having been exploited for the extraction of sub-surface flint and in fact they may well be post-Mesolithic in formation with the inclusion of Mesolithic material being due to slumping of the surface deposits. The total assemblage from the site included axes and roughouts, microliths and microburins, picks, scrapers, gravers, borers and a saw. The waste flakes appeared to result from axe, pick and large scraper manufacture.

The Neolithic Period (New Stone Age)

At some time round about 3,500 BC a new group of people came into Britain, now an island, carrying with them the knowledge of agriculture, domestic cereals such as Emmer Einkorn and Six Row Barley and domestic cattle, sheep, goats and pigs. On arrival they must have been confronted by a thickly wooded landscape with some minimal clearance by the indigenous Mesolithic population. As farmers their first priority would have been land clearance and a pre-requisite for that is axes. It was the use of polished stone axes that gave the Neolithic (New Stone Age) its name. Initially it would appear that flint from the chalk downs was utilised for axe manufacture, perhaps from surface outcrops, as would appear to be the case on Windmill Hill, Chalton (18) where many roughouts of flint axes have been found, but by an early date they were also mining the flint. Radio carbon dates between 3,400 and 3,100 BC exist for the Sussex flint mines.[23] It must have been rapidly realised, however, that Igneous and Metamorphic rock from the Highland zone of Britain could also be flaked like flint then ground to produce extremely durable axeheads. By the last quarter of the fourth millennium BC greenstone outcrops in Cornwall were being exploited on a large scale and during the following millennium axe factories were in production in north and south Wales, Northern Ireland, the Lake District, Teesside, the Mid-

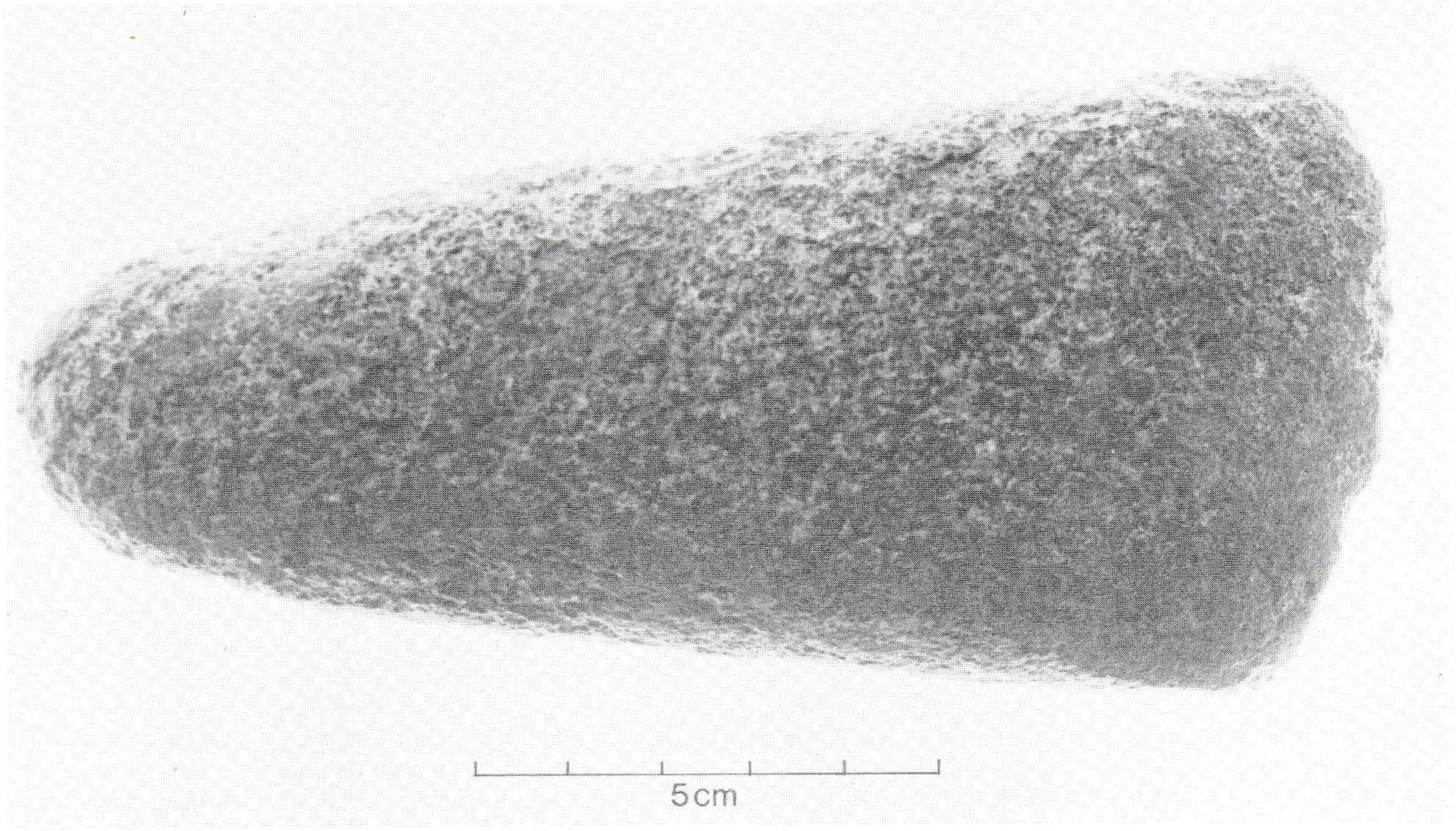

Plate 4: Neolithic stone axe head of Cornish origin found at Waterlooville.

lands and Brittany. With this there appears to have been an associated long distance trade network. In the Portsmouth area this is seen by the presence of axes from Cornwall, at Waterlooville (19) (Pl. 4), Leigh Park (20), Butser Hill (21) and probably Hambledon (22), from Graig Lwyd at Lee-on-Solent (23) and jadeite axes originally from Brittany at Hill Head (24) and Titchfield[24] (25). The pristine condition and slenderness of some of the jadeite axes in Britain suggest that they were more than work tools and it is likely that some axes circulated as status symbols. Other stone axes have been found in the area but it has not yet been possible to assign them to a source.

The farming aspect of the Neolithic in this area is reflected also in the casual finds of flint sickles from Titchfield[25] (26) and Clanfield (27), although it is possible that these were used for cutting reeds for thatching. A saddle quern was found in Langstone Harbour (28) and this would have been used in association with a rubbing stone to grind down cereals into coarse flour.

The technique of pottery manufacture was introduced into Britain with the first farmers, and regional styles developed. Pottery is invaluable to the archaeologist for dating purposes due to its rapid changes in form and decoration and their relatively short life. However, the earlier pottery was fired at low temperatures and in consequence does not withstand weathering. Thus Neolithic pottery is infrequently found as a surface scatter unlike the more durable pot-sherds of the Roman period. The little Neolithic pottery that has been found in the Portsmouth area has all come from excavation, either archaeological or constructional. The earliest pottery found locally comes from Corhampton (29). It was of the earliest, simple, bag-shaped Hembury style. This particular example was devoid of surface decoration apart from a slight burnishing of the surface. By reference to radio carbon dates from other British sites where it occurs one could suggest a date for its manufacturer and use between the mid fourth and mid third millennium.[26] Associated with this pottery from Corhampton were some faunal remains: Red Deer and Aurochs (Bos primogenius). Extremely large horn cores were found of the latter and may represent a wild specimen, although domestic Aurochs were kept during the Neolithic period. This possibly reflects what is seen on other sites, for although the economy was basically argiculture and animal husbandry, this was supplemented by hunting to a considerable degree.

In the later Neolithic there was a development of the earlier pottery styles. Decoration, especially of whipped cord impression but also bird-bone and finger-tipped impressions expanded to decorate a considerable proportion of the vessels' outer surfaces. Rims on Mortlake and Fengate style bowls developed to form collars to bear further decoration. With the latter style, narrow, flat bases also developed. All these different styles are loosely classed as 'Peterborough ware', and can be roughly dated to between the second quarter of the third millennium and the middle of the second.

Of the Peterborough wares the only examples to appear in the Portsmouth area are: one rim sherd of an Ebbsfleet style bowl with short lines of whipped cord impression inside and out, and two sherds of a Fengate style bowl from unstratified deposits at Wakefords Copse[27] (30). Several sherds of Fengate style came from the excavations at Bevis Grave, Bedhampton[28] (31).

A totally different style of pottery, 'Grooved ware' developed in the late Neolithic possibly a skeuomorph of wicker basketry, in the same way that some of the earlier

Plate 5: Neolithic long barrow, Giant's Grave, Meonstoke.

Neolithic pottery could be seen as skeuomorphs of stitched leather bags. The vessels are flat based and mainly decorated by incising, grooving and the application of cordons. These 'Grooved wares' come from three locations in this area. A number of abraded sherds came from the body of a large round barrow at Bishops Waltham[29] (32), excavated in 1953. One sherd came from the southern ditch of Bevis' Grave Long Barrow, Bedhampton and about forty sherds came from an area of burning discovered during the excavation of a Roman–British Farmstead at Paradise Lane, Fareham (33) in 1973.[30] From other British sites grooved ware can be dated to between the late third and mid-second millennium BC.

A characteristic feature of the Neolithic communities in Britain was their building of long barrows: long earthen mounds in which to inter their dead. These were of earthern construction in the largely stoneless areas but elsewhere had stone chambers at the eastern end which facilitated later interments.

There are still four long barrows of which some vestige remains in the Portsmouth area; Bevis Grave, Bedhampton; (31) Giant's Grave, Meonstoke; (34) Salt Hill, East Meon (35) and Droxford (36). A fifth on Portsdown (37) has been totally destroyed.

Bevis' Grave on Camp Down, Bedhampton[31] can now only be seen as a soil mark from the air. Excavations between 1974 and 1976 proved that the barrow mound had been completely removed, down to below the old land surface. However, the southern ditch remained and this was partially excavated. It was approximately 2m deep by 6m wide by 100m long and would have been matched on the northern side of the barrow by a similar ditch. These dimensions would suggest that it was one of the largest long barrows in the county. The primary silting of weathered chalk particles at the bottom of the ditch contained part of a red deer antler, probably utilised as a pick. The overlying soft loam contained faunal remains and sherds of Peterborough ware.

Giant's Grave (Pl. 5) is located in Meonstoke Parish just to the south of Old Winchester Hill. It is approximately 60m long by 20m wide by up to 2m high. It has been very badly damaged by quarrying along its length and by the ploughing away of its ends. It is reported that human remains and a silver coin have been found there in the past.

The Salt Hill long barrow has been largely ploughed away. It is approximately 40m long by 20m wide with the side ditches showing as shallow hollows.

The Droxford long barrow lies in the back garden of a private house. It is relatively intact although some holes have been dug into it in the past. It measures some 30m long by 15m wide and up to 3m high.

It was reported in the local press in the early nineteenth century that a barrow had been broken into by chalk diggers by the Naval Telegraph on Portsdown Hill. The latter stood just to the west of the George Inn. It was suggested in a survey published in 1939 that a mound then visible to the south east of the George Inn crossroads was the

remains of the barrow, but excavation on the site prior to extensive roadworks in 1966 proved that that particular mound was modern.[32] It would seem likely that the original barrow was completely removed in the quarrying to the south west of the George Inn.

Barrows are but one category of the large field monuments constructed during the Neolithic period, there are also the enclosures; causewayed camps and henges. These are almost totally absent in Hampshire although such sites occur in the surrounding areas. It has been suggested that the rampart and ditch across the ridge between Hillhampton Down and Butser Hill (38) may be of Neolithic date.[33] Certainly the ditch is sinuous and irregular in profile and somewhat evocative of the Neolithic causeway camp ditches, but is it likely that an unfinished ditch being constructed by gang labour in the Iron Age would produce a similar appearance.

Towards the end of the third millennium BC a new group of immigrants arrived in Britain. It is probably that they were followed by a succession of similar groups over the next 400 years. Certainly from this time onwards a different burial tradition was apparent, which most frequently manifested itself in southern Britain as a single inhumation under a round barrow. The inhumation was normally accompanied by a very characteristic tall pottery vessel called a 'beaker'. It was after this vessel that the immigrants were named 'Beaker folk'. The only example of a beaker burial in the immediate Portsmouth area is an exception to the generalisation given above. This burial came from Gob's Barrow[34] (39), an oval barrow situated 400m east of the George Inn, Portsdown. The barrow was partially excavated in 1926. A large depression in the centre of the mound deterred the excavator from investigating the central area but trenches to east and west of this revealed two cremations beneath flint cairns equally disposed about the centre and about 5m from it. At approximately 7m to the west of the centre was recovered the crouched burial of a 'young man?', accompanied by fragments of a 'beaker', a finely flaked flint dagger and a small jet bead. Unfortunately the material from this excavation has long since disappeared and only contemporary sketches remain so it is not possible to say anything specific about the type of beaker and its cultural affinities. Neither is it possible to be definite about the relationship of the burial to the rest of the barrow. Superficially it would appear to be in a secondary position, buried after the completion of the barrow. However, it was not recorded if the barrow mound was of a single construction or two or more conjoined mounds as have been found elsewhere in Hampshire in an early Bronze Age context.[35]

The two cremations seen at Gob's Barrow are paralleled in an oval barrow on Oakley Down, Dorset. However, an oval barrow number 35 at Winterbourne Stoke, Wiltshire contained two inhumations, one interred with a beaker.[36] It may now never be possible to ascertain for certain the true relationship of burials and barrow or a constructional date of the latter.

The only other beaker to be found in the area came from Newbury's pit, Warsash (40) in the 1930s. It is undecorated and biconical with a slightly inverted rim of Clarke's Wessex/Mid Rhine group.[37] Nothing was found associated with this vessel.

One of the most significant aspects of the Beaker immigrants was their knowledge of metallurgy. This is represented in Britain by gold ornaments and copper knives or daggers and also flat axes and halberds, the latter mainly of Irish origin. Although of enormous significance in the development of the succeeding Bronze Age, Beaker metalwork has not so far been encountered in this area.

The Bronze Age

British prehistory has traditionally been divided up into technological phases; e.g. Stone Age, Bronze Age and Iron Age, and whilst it is now appreciated that metal was in use at the end of the Stone Age and stone in the Bronze Age, etc. and that there are chronological differences for these phases between one area and another, nevertheless they are still convenient labels to use. The Early Bronze Age marks the change from a purely copper metallurgy of the Beaker folk to one utilising tin bronze with a wider range of products. The opening of the Middle Bronze Age coincides with a change in metalwork designs and the Late Bronze Age marks the introduction of lead bronze and the wider range of products that this more versatile alloy made possible, e.g. thin-walled hollow castings such as socketed axes. Fortunately, however, the archaeologist is not entirely restricted to metallurgical and typological information.

During the Early Bronze Age several different cultural groups are apparent, distinguished by their differing funerary traditions. Of these, the food vessel users were probably very much influenced by the beaker groups. An example of one of their burials has been recorded in the Portsmouth area, from the Great Barrow at Bishops Waltham[38] (41). This barrow, 24.5m in diameter by 3.5m high, was excavated in 1953/4. It contained a cremation and soil silhouette of an inhumation within a tree trunk coffin. The cremation was accompanied by two bronze daggers and the inhumation by a bi-partite food vessel with a short vertical collar and internally bevelled rim. The rim and the upper part of the external surface were liberally decorated with cord impressions. A second food vessel

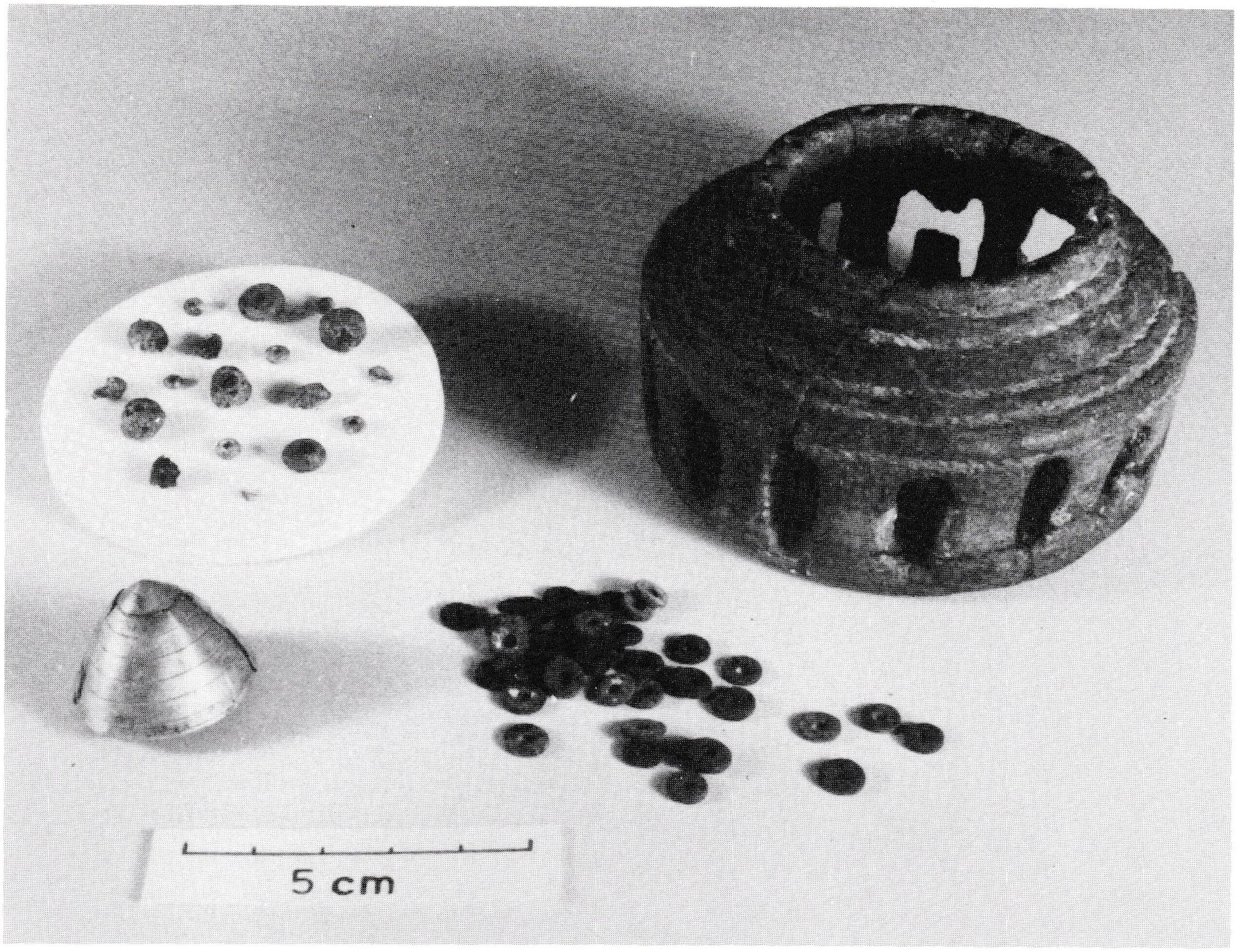

Plate 6: Grave goods from an Early Bronze Age cremation, Southwick Hill crossroads, Portsdown.

of biconical form with two opposed lugs came from Southwick Hill Crossroads, Portsdown[39] (42). Unfortunately there was no burial associated with it and it is believed that the Bronze Age grave in which it had been contained had been largely destroyed by a later Anglo-Saxon grave cutting through it.

Another group in the Early Bronze Age were those who cremated their dead and buried the ashes in urns of various forms. An example of a 'collared urn' burial has been found in this area at Barnet Copse, Chalton (43). The collared urn was found inverted, and set into the top of a lynchet or field boundary. This is significant as it means that the lynchet is at least of Early Bronze Age date. Contained within the urn were cremated bones accompanied by a jet pendant of annular form and perforated for suspension, five amber spherical and disc shape beads, a 'V' perforated semi-circular amber spacer plate and seven biconical cylindrical or segmented faience beads. Faience beads were made from a fine quartz, probably sand, cemented together by an alkali and fired. A glaze of pounded silica and copper salt was then fired over the surface. The result of this was a bluish green bead with a glassy surface. Such beads in the past have been seen as proof that there were contacts in the Early Bronze Age between Wessex and the Aegean, especially Mycenean Greece, where similar segmented faience beads occur. However, recent re-interpretation of the composition of the British beads suggests that some at least may have been made in Britain. In the past the faience and amber beads from the Barnet Copse urn would have led it to be classified as belonging to the Wessex Culture, as almost all of the richer burials were. The Wessex Culture, was seen to be a dominant group, possibly of Breton stock, who became increasingly powerful in the Wessex area dominating the trade routes between Ireland with its copper and gold sources, and the continent. However, burials of the Barnet Copse type are seen elsewhere in Britain and could be considered as nothing more than the burials of slightly more affluent members of the Early Bronze Age communities. Having said that, however, there are still inhumations and cremations that are considerably richer than the remainder and which do not contain urns or food vessels but instead contain more exotic pottery types represented by a small range of incense cups. This type of burial has a decided concentration in the Wessex area, mainly Wiltshire, Dorset and Hampshire but with outliers in, for example, Sussex and East Anglia. Two examples have come to light in the immediate vicinity of Portsmouth, both at Southwick Hill crossroads, Portsdown (44). In 1948 roadworks led to a rescue excavation which

Plate 7: Accessory vessels from an Early Bronze Age inhumation, Southwick Hill crossroads, Portsdown.

revealed amongst other archaeological features an Early Bronze Age cremation.[40] This was at the bottom of a pit approximately one metre diameter and one third of a metre deep into the chalk. Mixed amongst the fragments of charred bones were sixteen amber beads and 107 discoidal shale beads. On top of the pile lying point downwards was a 'V' perforated shale button encased in a gold cover. The beads showed no sign of burning and it is probable that they formed, with a gold covered button, a necklace, the string of which had subsequently broken, scattering the beads amongst the cremation. On the bottom of the same pit but against the side wall were the crushed fragments of a slotted incense cup (Pl. 6). This when reconstructed proved to be biconical with a lower wall sloping outwards slightly and perforated by sixteen sub-rectangular holes. The inward sloping upper wall was decorated with two pairs of encircling lines of whipped thong impression, with a similar encircling line on the shoulder between the lower and upper walls. The flat rim was decorated with small sub-rectangular impressions.

The second example was uncovered during rescue excavation necessitated by yet further road works at Southwick Hill crossroads.[41] This was an inhumation of a tall female between fifteen and seventeen years old. The body was lying in a semi-flexed position on its right side with its head approximately to the east. At its forehead were two miniature vessels (Pl. 7). One was a simple bucket shaped pot approximately 4.7cm high with possibly a crude suggestion of a shoulder and collar. The other was a vessel 6.1cm high hollowed at top and bottom and with a constricted waist. The slightly burnished surface was decorated with twelve encircling lines of twisted cord impressions. Two similar circles of twisted cord impression decorated the upper and lower rims. There were also four surrounding lines of sub-circular impressions. This double-ended vessel falls into a category of vessels classed by Piggott[42] as evolving from a French vase support type and belonging to a Wessex context. Four other examples are known: a casual find from Dorchester; from an Aubrey Hole at Stonehenge; from a primary cremation in the bowl barrow at Winterbourne Stoke, Wiltshire and from an inhumation accompanied by gold discs, beads of amber faiences and stone pendants, spacer plates and an awl from Lake, Wiltshire. Because of the controversy over the significance of Wessex type material and also its date, it was felt to be very important to obtain radio-carbon dating for the Portsdown skeletal material. This was done and it produced the remarkably late date of 1,059 BC as opposed to

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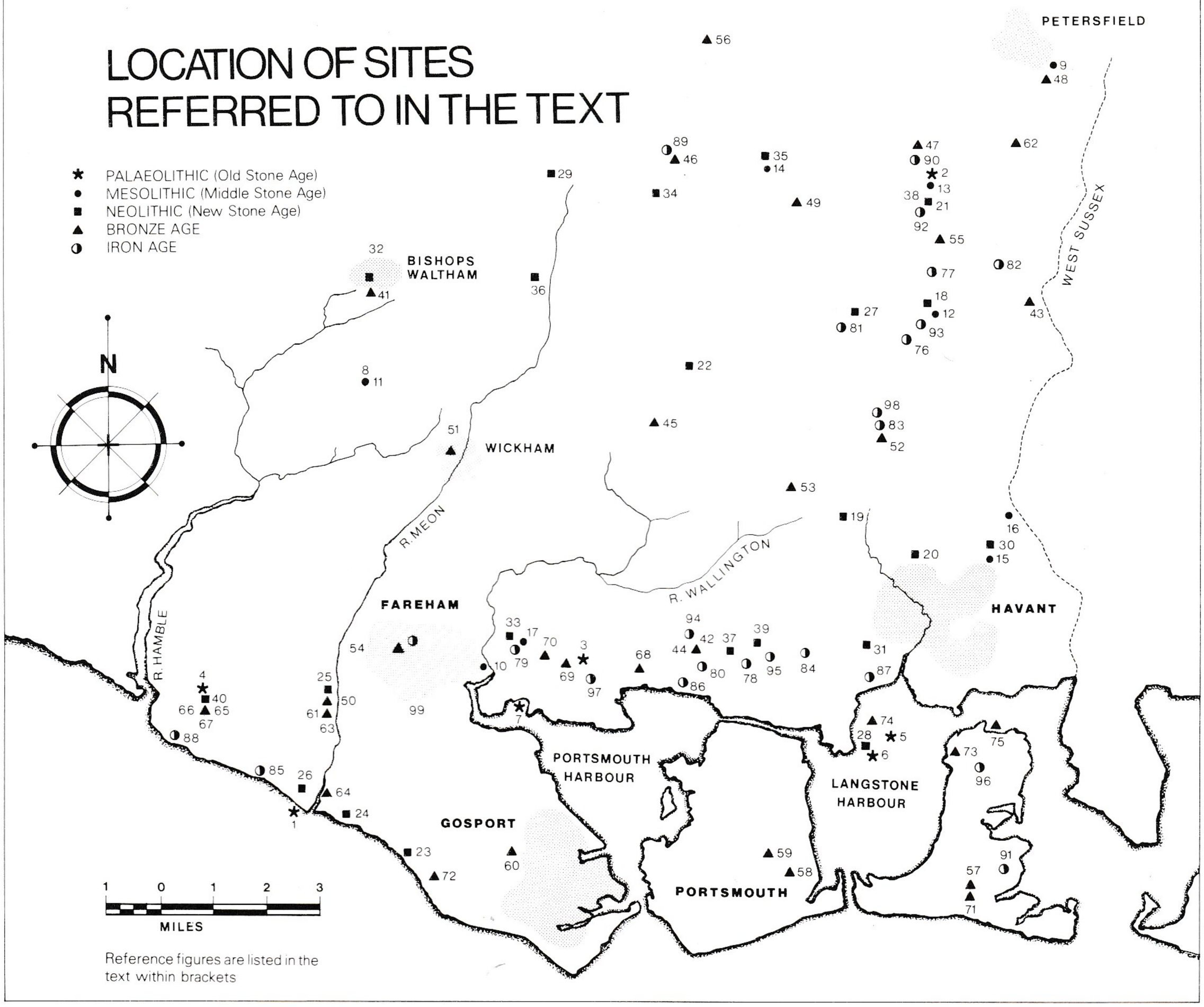

Reference figures are listed in the text within brackets

the very few existing dates for Wessex burials which fall into the twelfth and thirteenth century BC. There are even earlier dates for the supposed Wessex cultural activity in Stonehenge. The reason for this late date is not clear although Portsdown could be seen as peripheral to the main Wessex area.

It is likely that both the Wessex cremation and inhumation were originally buried beneath round barrows. Although a careful search was made for surrounding ditches during the excavations none were found. Several gullies were observed cut into the chalk, one of which had truncated the inhumation. The artifacts from these gullies suggest they were produced in the nineteenth century AD, probably when the top of Portsdown was stripped of vegetation to allow a clear field of vision between the newly erected forts. It is probable that other Prehistoric earthworks suffered the same fate. Nevertheless six barrows seem to have survived until the 1930s, when a survey of barrows in Hampshire was undertaken.[43] None of these can now be seen from the ground, having been totally denuded by ploughing. The nearest standing round barrows to Portsmouth are a group of three, originally four, bowl barrows on Great Ervills Farm, Denmead (45) (Pl. 8). Several may be seen in and around Old Winchester Hill, Iron Age Hill Fort (46), in varying states of preservation and three or four may be seen on Butser Hill, with a group of three on the Ramsdean Down Spur (47). However, by far the most impressive are the barrows on Petersfield Heath (48), which include fifteen bowl barrows (round mounds with surrounding ditches and outer banks); a bell barrow (similar to a bowl barrow but with a narrow flat area, or berm, separating the mound from the ditch); a disc barrow with two off centre tumps (similar to the bell barrow but with an extremely wide berm and the mound being reduced to one or more small hummocks); and four saucer barrows (which have a low central mound extending to the inner lip of the enclosing ditch). Disc and saucer barrows tend to contain female burials whereas bell barrows appear to have been utilised for deceased males.

Although bronze implements and weapons had almost certainly made a considerable impact on the Early Bronze Age communities, nevertheless flint and stone continued

Plate 8: Bronze Age bowl barrows, Gt. Ervill's Farm, Denmead.

in use. Arrows were still being armed with flint arrowheads, now of the distinctive barbed and tanged form. Examples of these locally come from Leydene Ditches (49), Titchfield (50), Wickham (51), Cowplain (52), Horndean (53), Fareham (54) and other places. The relatively easily and cheaply produced flint scraper also appears to have been used extensively, mainly, one assumes, for skin preparation, and they have been found widely in this area. Igneous and metamorphic rock also continued to be exploited for producing battle axes and axe hammers – at least three occur on the border of the area under consideration.[44]

In both the Neolithic and Bronze Age the bulk of archaeological evidence comes from burials. Settlements are relatively scarce. However, two Middle Bronze Age settlements have been found in the Portsmouth area. A farmstead was discovered and excavated when the A3 was extended through Gravel Hill Bottom, Chalton (55), in 1968.[45] This comprised two circular huts, two floors cut into sloping chalk surface, three pits and a possible associated track way. The circular huts were represented by floors terraced into the hillside and partly enclosed by postholes 6m and 4.5m diameter.

The occupational layer over the floor of the larger hut contained pot-sherds, a bronze knife and a palstave. Within the confines of this hut was also a 1.3m diameter pit in the filling of which was found more pot-sherds, a whetstone and loom weight. The smaller hut had a hearth in the centre of its floor. The excavator suggested that the settlement was probably for a single family unit, possibly living and sleeping in the larger hut and cooking over the fire in the smaller. The floors were probably working areas and the pits for storage. The farmstead appears only to have been occupied for a short period of time and the presence of useful bronze implements on the floor may point to hasty abandonment. A radio carbon determination based on charcoal from the site gave a date of 1,243± 69 BC.

The second settlement site falls at the extreme edge of the area under consideration, at Westbury, West Meon[46] (56). Excavations suggest that a circular house between 4 and 5m diameter had stood on the site. This may have had a central ring of posts to support the roof and a chalk block or turf outer wall laced with stakes. The hut floor had been terraced into the sloping chalk. As at Chalton there were associated pits, again probably for storage. Examination of the faunal remains suggest that ox, sheep, pig, horse and bird were present on the site.

A marked feature of the late Middle Bronze Age is the bronze hoard. Such hoards have been found locally at Gable Head, Hayling Island (57); St. James' Hospital, Milton (58); St. Mary's Hospital, Fratton (59); HMS *Sultan,* Gosport (60) and Titchfield (61). The major component of the majority of these hoards is the palstave, a type of bronze axe. In form it can be divided into two approximate halves, an expanded cutting edge and a butt for fitting between the split ends of a crooked haft. This butt has an approximate 'I' section with flanges at top and bottom to restrict movement in the haft during use. The addition of a stop ridge prevented the further splitting of the haft. In some examples a loop cast on midway along the palstave would facilitate fastening to the haft.

Unfortunately all the local hoards have been casual finds so there is a limit to what can be said about their archaeological context. However, the contents of the hoards themselves are of considerable interest.

The Gable Head hoard[47](Pl. 9) is by far the largest. It contained twenty-seven palstaves and two armrings, one decorated and one plain. There was also a fragment of a quoit-headed pin, which in its complete state would have consisted of a long sub-circular section pin surmounted by a large, flat, undecorated ring. The St. James' hoard[48] contained only one looped palstave but four armrings, two of which were decorated. Regrettably this material was lost during enemy action in 1940, but a surviving drawing of one of them shows that the engraved geometric decoration was almost identical to that on the armring from the Gable Head Hoard.

Plate 9: Examples of palstaves, armrings and fragment of quoit headed pin from the M.B.A. hoard found at Gable Head, Hayling Island.

The St. Mary's hoard was uncovered during building work, and although at least four palstaves were observed they were not recognised for what they were and only two were retained. They have recently been relocated in the Isle of Wight.

The HMS *Sultan* hoard[49] came to light when a concrete floor was being removed. The palstaves were observed to be contained in a small pit, cutting edge downwards. It is likely that the broken butt ends of most of the palstaves were due to the laying of the original floor, and that they were in good condition when originally deposited. There was a total of nineteen palstaves and one plain armring.

Finally a hoard of six complete palstaves and three fragments was found near Titchfield[50] in 1897 and is now in Southampton Museum.

When one looks at these hoards there are certain factors which are immediately apparent. The first and most obvious is their coastal distribution; none being more than two miles from the shore and most less than a mile. Secondly the palstaves generally appear to have been in good condition when deposited and in some cases possibly unused. Thirdly there is a wide range of palstave types present in the large hoard but there are similarities between all. Fourthly there are distinct parallels between, for example, the Gable Head Hoard and several from Northern France, not only the palstaves but especially the armrings. The geometric pointille decoration is seen on armrings from north-eastern France.[51] Finally there appears to be a distinct concentration of annular armrings in this area, which has produced almost of a third of those known from Southern Britain.

What all this means in human terms is more difficult to decide. Whoever was depositng these hoards was almost certainly travelling along the coast. It is likely to have been an itinerant smith who was carrying the stock with him for redistribution by some simple exchange mechanism. There is no suggestion that these were accumulations of scrap bronze for recasting and in the admittedly unscientific discovery of most of the hoards, neither was there any in situ evidence for bronze casting. Thus it seems likely that they were produced at a single regional centre, which had been strongly influenced by Northern French traditions and dispersed from there to individual settlements. It has been suggested elsewhere[52] that the hoards were probably a reflection of intensive production over a limited period of the year at a time when the smith was not directly involved in food production as would be the case in a society where there was not sufficient surplus to employ a full time smith or smiths. Nevertheless, whether full or part time it was a specialist task involving considerable expertise.

Not all the Middle Bronze Age metalwork found locally came from hoards. Apart from the palstave found in the settlement at Chalton discussed above another came as a casual find from near Buriton (62). There have also been two separate finds of socketed bronze spearheads from Titchfield[53] (63) and Titchfield Haven[54] (64). The former

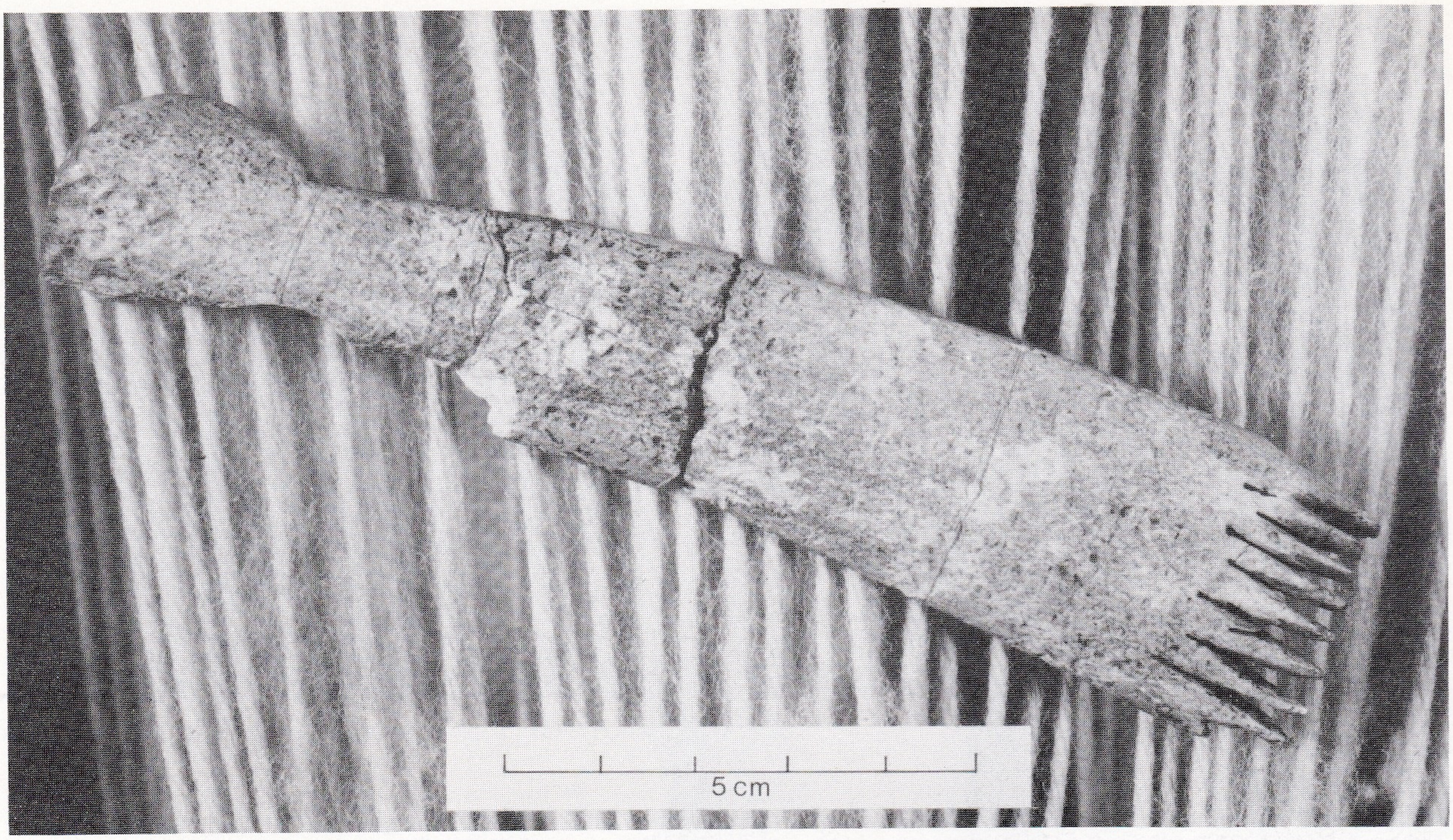

Plate 10: Iron Age bone weaving comb from Wallington Military Road, Fareham.

was the side-looped type with small diametrically opposed loops on the side of the socket and the latter of basal looped type with the loops forming an integral part of the base of the blade. Both the latter are of late Middle Bronze Age date. Of a similar date is a spiral twisted bronze torc or neck-ring found at an undisclosed spot in Langstone Harbour. This is made of square section rod which has then been manually twisted. It has one hooked and one plain terminal. It is suggested that this type of ornament has a North European origin and arrived in Southern Britain via either Ireland or Northern France.[55] Bearing in mind the North French connections discussed above, the latter would seem most likely in this instance.

Deverel-Rimbury is a loose generic term employed to cover a whole range of urn types found in Southern Britain. These include bucket, barrel and globular urns which are found both in flat and barrow cemeteries. Unfortunately its chronology is not well understood and it has been progressively moved back in time from Late Bronze Age then to Middle Bronze Age, and now an Early Bronze Age date is postulated.[56] It has to be admitted that radio carbon determinations for this class of pottery have been seen to overlap with Wessex dates, but as the chronology of the Wessex culture still is not fully understood this need not be seen as too conclusive.

Several Deverel-Rimsbury urns are reported to have been discovered earlier this century during gravel extraction at Dykes pit (65), Buttons pit (66) and Newbury's pit (67), Warsash.[57] More recently the construction of the M27 over Portsdown has lead to three more bucket urns being discovered. One found near Falmouth Road, Paulsgrove[58] (68) was observed to be buried upright in a pit containing black soil. Although the rim was missing part of the body and base remained and this contained bone fragments. Regrettably the value of this find was not appreciated and it was discarded. The base of another bucket urn was found west of Nelson Lane, Fareham[59] (69). This had been buried upright in a pit 43cm diameter, the pit fill consisting of charcoal and burnt flint. Finally the top of an inverted bucket urn was found near Downend Lane, Fareham[60] (70). This was 33cm diameter over the slightly everted rim and carried a finger nail impressed cordon around a slight carination some 7cm below the rim. Some fragments of cremated bone remained in the filling of the urn. Fragmentary remains from Elm Close Estate, Hayling (71) and Lee-on-Solent[61] (72) also appear to be from bucket urns. It is likely that three urns represented as being found in North Hayling Island were also recognisable as Deverel-Rimbury although positive information is lacking.

A remarkable globular urn was discovered in Crate Field, North Hayling (73) during the extraction of brickearth for brickmaking. It was 50cm high with a maximum diameter of 56cm with two pairs of diametrically opposed pierced lugs on the shoulder. It was made of a coarse, flint gritted red-brown fabric. It appears to have been buried upright on what was thought to be the remains of a small fire. It was suggested at the time that it may have been a vessel utilised in salt production but it is unlikely that the vessel could have withstood direct heat, neither does it show traces of burning. A more satisfactory explanation is that the 'remains of a small fire' had funerary rather than industrial significance.

Fragments of what appear to be Deverel-Rimsbury type pottery are constantly being eroded out of the southern shore of North Biness Island (74) in Langstone Harbour and may well represent the domestic version of the cinerary material above.

The Late Bronze Age is now largely a vacuum created

Plate 11: Iron Age pottery from Site 15, Chalton.

by the pushing back of material into the earlier periods. To a certain extent this has been filled by what was considered as Early Iron Age phenomena moving in the same direction. There is a move afloat to insert two new types of pottery seen at South Cadbury, Somerset and Rams Hill, Berkshire into the gap.[62] It still seems generally accepted that the metal typology should still stand, however, and this accentuates the problems over linking metalwork and ceramics. Although there was a great upsurge in production of metal type objects and the range increased enormously in the Late Bronze Age this is not reflected in finds from this area. These are limited to fragments of three socketed axes unearthed during the excavation of a yacht basin at Northney (75) in 1968.[63]

The Iron Age

Whereas in the preceding Bronze Age the bulk of the archaeological information has been derived from burials and significantly less from settlements, in the Iron Age the situation is reversed. Although the dearth of Iron Age burials has frequently been exaggerated, nevertheless, they are considerably less common than in the Bronze Age. By contrast many more settlement sites have been discovered and excavated. This situation is reflected in the Portsmouth area where no definite Iron Age burials have been found. Knocker[64] claims that three inhumations from the Anglo-Saxon cemetery site at Snell's Corner, Horndean (76) were of Iron Age date but the evidence for this is extremely dubious and may equally well point to their being Romano-British. Several settlement sites, however, have been found, although all unfortunately in a rescue context. A large number of surface scatters of Iron Age pottery are also known throughout this area, in some cases associated with traces of enclosures.

Approximately a dozen Iron Age sites have been excavated in the area. Amongst the earlier sites are: Chalton Site 50: (77) the George Inn, Portsdown (78) and Wallington Military Road (79). Chalton Site 50[65] was discovered in 1968 during work on the A3 London–Portsmouth road when six pits and seven post holes were uncovered. It is probable that this only represented the western part of a larger site and belongs to an Iron Age farmstead. There was a relatively large amount of pottery present which appears to have a limited time span and fits Cunliffe's Park Brow–Caesar's Camp style from probably the sixth and early fifth centuries BC. Faunal remains from the site show that ox predominated but that pig, sheep/goat, horse and deer were also present. Unfortunately the quantities of bone remaining mean that such results cannot be very reliable. Two lower and one upper stones from saddle querns were found in two of the pits.

The George Inn Iron Age site came to light during exca-

vations in advance of roadworks at the crossroads of the A3–B2177.[66] It appears to have consisted of a living or working area, and a storage area. The former was represented by a mass of post and stake holes. Two loomweights had been utilised as post packing material. Quantities of wicker impressed daub also came from these holes suggesting a walled structure. The hearth or cooking area was less clearly defined by a pit, full of burnt flint, pot boilers and ashes. An adjacent hollow seems to have been initially used as a hearth then converted to a domestic rubbish tip which contained quernstone and loomweight fragments. A second hollow contained butchered goat bones. The third area contained well-cut storage pits in one of which was a chalk spindle whorl. The pottery from the site falls into Cunliffe's Park Brow–Caesar's Camp group with shouldered jars with everted rims, and thus of fourth to third century BC date. The exception is a large everted shouldered jar with finger tip decoration around the rim which harks back to the Ultimate Deverel-Rimbury tradition of the seventh century but this may represent no more than local conservatism.

The Wallington Military Road, Fareham, Iron Age site[67] which was excavated in advance of the M27 construction also appears to have come into existence in the fifth to third centuries BC after which it probably had a life of some 400 years. The earliest feature on site was a small irregular linear ditch with three openings which continued for at least another 1,000 to 2,000m beyond the excavation. It is probable that this formed a land division and the excavator suggests that it may have been part of a stock enclosure. The earlier levels of this ditch contained pottery of the Park Brow–Caesar's Camp group of the fifth to third century but with elements of All Canning Cross–Meon Hill group of a similar date. The linear ditch was later replaced by a small gulley on a broadly similar alignment and to the south of this there developed an enclosed complex of circular buildings, four post structures, hearths, grain parching areas and pits. These features produced pottery of barrel shape, bucket shape and proto bead-rimmed jars inscribed with linear grooves, diagonal lines and dots, typical of the St. Catherine's Hill–Worthy Down style of the Saucepan pot continuum of the third to first centuries BC. The site produced a number of quernstones both saddle and rotary and carbonised wheat grains and other seeds from weeds of cultivation which presumably resulted from accidental over-parching. The large number of burnt flints was probably related to this process. In addition a small iron reaping sickle, one of the few iron objects to survive from the Iron Age in this area, also suggests an element of cereal cultivation. However, a set of loomweights and a bone weaving comb (Pl. 10) from the site also suggest that sheep or goats were being reared for wool. The faunal remains show that ox, horse, pig, deer and rodent were on the site. The ox and horse were possibly for draught as well as food. This tends to be borne out by the presence of what is thought to be iron harness and/or cart fittings.

Two Early Middle Iron Age occupation sites that have been excavated but where only ephemeral traces remain are Southwick Hill crossroads (80) and Clanfield Reservoir (81).

Southwick Hill Cross Roads Iron Age site was discovered during rescue work in advance of road works.[68] It consisted of a number of pairs of flint packed postholes interpreted as the ubiquitous Iron Age hay drying racks, in this instance very appropriately placed on the crest of Portsdown, and one possible four post structure, a type which has often been described elsewhere as a granary. The very small quantity of pottery from the site was almost totally featureless but the site should fit into an Early/Mid Iron Age context.

The site at Clanfield Reservoir[69] consisted of the limited remains of what had probably been a fairly large Iron Age enclosure. All that remained were two partially destroyed pits and a length of enclosure ditch with a 'V' profile and flat bottom. The larger of the pits was a bell-shaped storage pit and contained amongst the back-fill an almost complete saucepan pot of St. Catherine's Hill–Worthy Down Style and the forequarters of a small horse. The enclosure ditch, however, contained pottery of a much earlier date. One was a bipartite vessel with furrowed shoulder and horizontal bands of dot-filled chevrons belonging to Cunliffe's Kimmeridge–Caburn group, which occurs all along the Central South Coast during the sixth century BC. At Clanfield it was stratified with coarse flint gritted pottery of bucket urn shape, with finger-nail impressed decoration along the rim and shoulder. This type has often been considered of mid-seventh century date, being a response in pottery to the high-shouldered bronze situla, or bucket, present at that time. At Clanfield both vessels are contemporary. It is interesting to note that the bipartite vessel also appears to be a skeuomorph of a bronze bowl, the best example being that found in the hoard from Welby, Leics.[70] The presence of Romano-British features on the site suggest a long occupation, perhaps 700 years, although repeated reoccupation of the same site is a possibility.

Site 15 at Chalton[71] (82) falls into a Middle/Late Iron Age context. It consisted of four pits and two sets of paired post holes, the latter probably representing hay drying racks. The pits produced some interesting material including chalk and clay spindle whorls, chalk loom weight, rubbing stone and points of antler and bone which may represent thread pickers for use in weaving. Of a less functional nature was a spiral finger ring. The site probably

represented the southern extremity of an Iron Age farmstead. The pottery (Pl. 11) was of Cunliffe's St. Catherine's Hill–Worthy Down style with elements of the succeeding Southern Atrebatic style so probably belongs to the late second or early first centuries BC.

Two occupation sites have been excavated in the area that belong largely to the latter part of the Iron Age: The Causeway, Horndean (83) and Crookhorn Lane (84). The former was a small rescue excavation carried out during building operations in 1958.[72] This consisted of a 'V' shaped gulley 1.3m wide by 0.7m deep. It contained typical Southern Atrebatic pottery of early first century AD: globular jars with short necks and everted rims, everted straight sided jars with bead rims and vertical rimmed bowls with shallow vertical decoration.

The Crookhorn Lane site was brought to light by a gas pipe line trench which sectioned several features including a pit 1.7m diameter which contained first century AD pottery.[73] Further excavation was carried out which revealed a second pit, a post hole and ditch. The latter was 1.75m wide by 0.2m deep, was excavated over a length of some 6m and contained a large quantity of late Iron Age material. The pit, however, contained earlier saucepan pot material demonstrating at least two phases of occupation.[74] A depression some 5m across was also found cut into the chalk up to a depth of 0.4m at one side and 0.05m at the other. The excavator suggested that it was some form of floor although no trace of any roof support could be found. The pottery found in this feature would suggest that it was contemporary with the ditch.

Of a slightly different nature are the salt production sites which occur in large numbers along the coastline. They have been observed outcropping along the shorelines from the Hamble to the Sussex border but with a concentration around the heads of Portsmouth and Langstone harbours. Of these sites only four have been excavated to date: Brownwich Farm, Titchfield (85), Paulsgrove (86), Bedhampton foreshore (87) and Hook (88). The first consisted of a single gulley with some associated stakeholes and two hearth areas within the gulley. However, a large amount of 'Briquetage' remains; clay vessels, moulds etc. used in the salt extraction process make the nature of the site clear. The material included a salt cake mould support and several evaporating vessels or mould fragments. The pottery was of Southern Atrebatic Ware and the excavators attribute the site to the late first century AD.[75]

Of Middle Iron Age date is the salt producing site on the Paulsgrove foreshore. This site was excavated in advance of marine erosion.[76] Its nature as a salt producing site was suggested by the location of the site, a small quantity of briquetage and a total absence of domestic refuse. There was no indication of any structures on the site, simply a rectangular surface 5m by 3m made up of alluvium and burnt clay and containing a large quantity of pottery. The excavator ascribes the latter to the Middle Iron Age with elements of St. Catherine's Hill–Worthy Down style.

Reclamation work on Bedhampton foreshore in 1971 revealed a series of hearths which in all probability related to salt manufacture,[77] although no briquetage was found. It may well be of a similar date to the Paulsgrove site.

The site at Hook was excavated in 1930[78] and revealed two rectangular 'beds' of clay which had been subjected to intense heat. Embedded into the clay were several square section struts. Other struts of straight rod and bifurcated form were also found, which the excavator interpreted as supports for evaporation pans. Several thin clay discs were also uncovered. The pottery found in association with these features was considered to date between the first century BC and the first century AD with some run-on into mid Roman.

A new feature which appears in the Late Bronze Age and develops throughout the Iron Age is the hill fort. Its emergence must reflect in some way changing social structures and the need for larger scale defence, in many cases the defence of pre-existing settlements. It is possible that the stimulus for this development lies in an emerging social elite.

In this area one definite and one possible hill fort lies in fairly close proximity: Old Winchester Hill (89) and Butser Hill (90). It has been pointed out that such pairing is common in the area from Dorset to Sussex where one is akin to a livestock enclosure and the other incorporates grain storage pits.[79]

Without refuting this distinction Bradley[80] suggests that this may be a chronological difference with one, in this case Butser Hill, being replaced by the other, Old Winchester Hill. Unfortunately as negligible excavation has been carried out on either site their chronology must remain a matter for conjecture.

Butser Hill is in essence a down top that has been demarcated by cross dykes. The main defence is a curving bank 1.5m high separated by a broad berm from an irregular ditch 9m wide. As stated earlier there is some dispute as to its date which could be either Neolithic, Bronze Age (possibly related to the Middle Bronze Age farmstead in the valley below) or Iron Age. If Butser Hill really does represent an Iron Age promontory fort then it is either extremely poorly defended or alternatively unfinished. By contrast Old Winchester Hill (Pl. 12) is an excellent example of a univallate hill fort. Its bank, ditch and counterscarp bank enclose a pear shaped area of some 5.6 hectares with a marked strengthening of the defence to the south east. The defences are broken by two inturned entr-

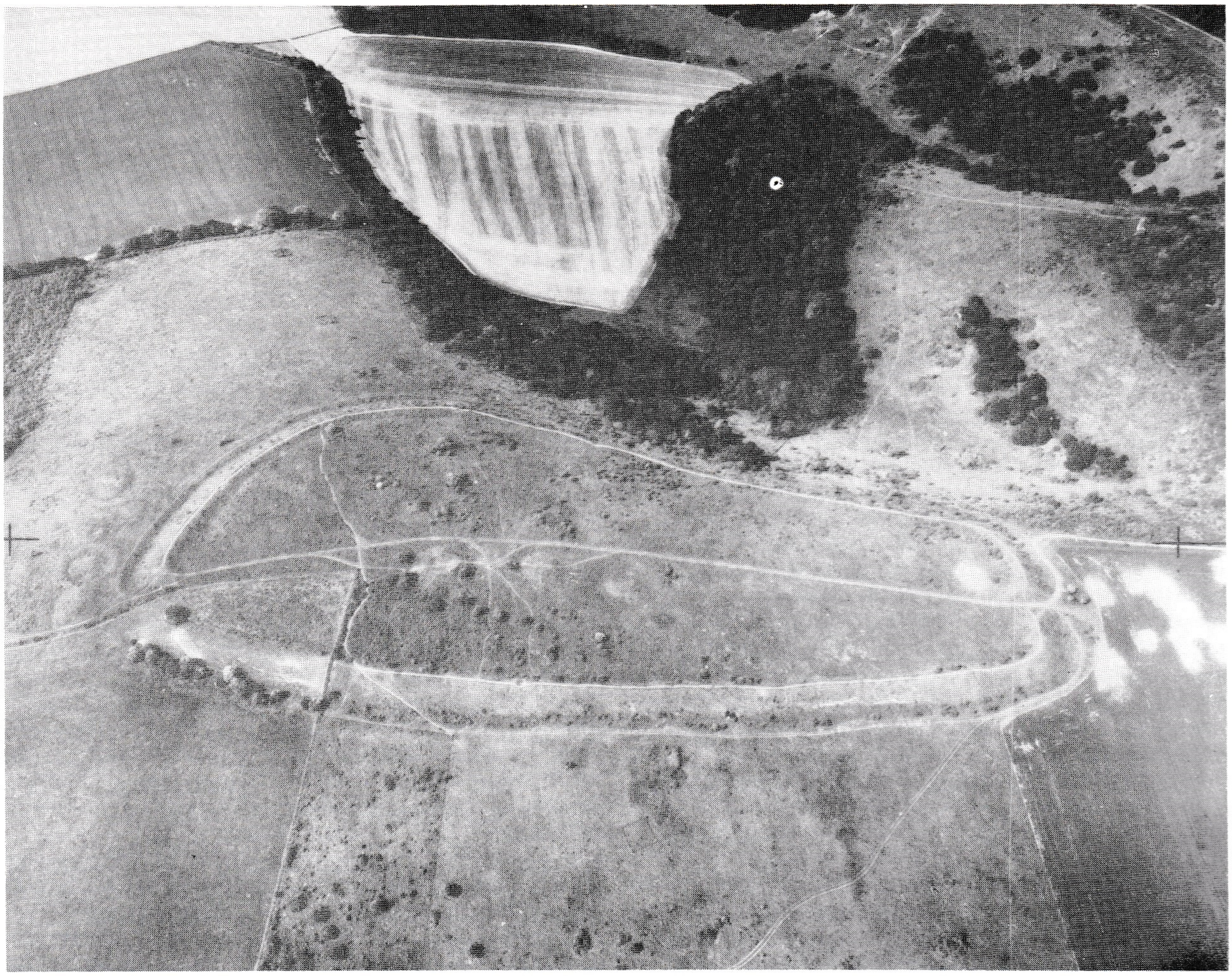

Plate 12: Aerial view of the Iron Age hill fort, Old Winchester Hill, from the south.

ances at West and East, the former being higher at its ends and further defended by some form of outwork now seen as two hollows. Because of the lack of excavation on the site it is not possible to be very specific about its date or function: whether it was continually occupied and if so by how many, or was merely a place of retreat. However, its size and distance from similar forts might suggest that it was an important local centre with a fairly extensive territory of influence.

A third site which requires mention but about which little constructive can be said is the anomolous ring work of Tournerbury (91) on the eastern side of Hayling Island. It is a univallate ring work enclosing 2.6 hectares and has one original entrance to the west approached by a hollow way.[81] Trenches have been dug across the defences and Iron Age sherds from four vessels have been found beneath the rampart which may be of saucepan pot type and loosely dated to between the third to first centuries BC. It may well be later and was probably reused at the time of the building of the Saxon Shore defences in the late third century AD.

Earthworks of a slighter nature are also present in the Portsmouth area. These are the lynchet and enclosure banks and ditches. These are notoriously difficult to date and doubtless many have their origins in the Bronze Age. Many have now been ploughed away and can only be seen from the air but others on Butser Hill (92), Windmill Hill (93) and the north flanks of Portsdown (94) can still be discerned in the right lighting conditions. Little work has been done locally on the excavation of such features, the exception being a stock-enclosure and ranch boundary near Hoylake Road, Portsdown[82] (95). The earliest feature found was a gully flanked by post holes, the former was broken by an entrance causeway but the post holes, presumably for a fence, were continuous. This was replaced in a second phase by an enclosure 53m by 45m with opposed entrances in its east–west sides. The enclosure was bounded by a 'U' profile ditch averaging 1.1m deep by 2.5m wide. The small quantity of pottery on the site pointed to an early Iron Age date.

A series of successive Iron Age fields and boundary earthworks were observed by the same excavator some 500m east of the above site during road widening. It is suggested that the land mollusca found indicated that the land had on several occasions been left fallow between ploughing prior to its conversion to open pasture; a hint of

Plate 13: Concentric circular gullies, pits and post holes representing a late Iron Age shrine, Hayling Island. (The masonry feature is the foundation of the 'cella' of the overlying Romano–Celtic temple).

agricultural practices in operation during the Iron Age.

One group of monuments is lacking in Hampshire. That is the sacred or ritual sites seen elsewhere such as the Causewayed Camps, Henges, Stone Circles or even the ritual deposits of metal work. This is to some extent compensated for in the Iron Age by the presence of an extremely uncommon Late Iron Age shrine of which there are probably no more than six in the whole of Northern Europe. The site is in Towncil Field, North Hayling (96) and was encountered during the excavation of the overlying Romano-Celtic temple.[83]

The Iron Age shrine consisted basically of a circular building or enclosure surrounded by a quadrangular enclosure. The former was represented by concentric 'V' shaped gullies surrounding a circular area containing post holes and a central pit. (Pl. 13). The inner of the circular gullies also contained the bases of post holes. Two large post holes were found on either side of the entrance. Unfortunately, due to the levelling which must have been carried out during the construction of the overlying and surrounding masonry walls of the Romano-Celtic temple in the second half of the first century AD, many of the Iron Age features have been truncated or totally obliterated. In consequence reconstruction of the original circular structure is problematical. It is likely that it originally consisted of a circular building, presumably roofed, although the nature of the internal post holes does not prove this, with a doorway on the eastern side flanked by large door posts. If it was roofed then, like other known examples of circular Iron Age huts, it did not have a central post hole as there was no evidence that a post had been contained in the central pit. This may well have stood open and been used for ritual purposes, pouring libations perhaps, before it was deliberately back filled. The circular building was set towards the back of the enclosure which also had its single entrance on the East side. The enclosure was demarcated by a ditch, in places supplemented by some form of palisade. The nature of the site is made clear by the artefactual and bone material which came from it. The majority of the objects came either from the 'Courtyard' area in front of the circular building or from the pits and gullies. They fall into a number of categories: personal decorations such as fibulae, bracelets, finger rings, beads, etc: horse and chariot or cart fittings such as a bridle bit, terret ring for passing reins through and nave-hoops for vehicle wheels: military equipment such as iron spear-heads, scabbard binding and chapes and belt hooks: and coins which include not only the local issues of Verica but also of the Durotriges, Dobunni and even the Coritani. More unusual and suggesting strong continental links are over twenty coins from Central and Belgic Gaul and four from Armorica. It is interesting to note that many low value plated coins are included. It has been suggested[84] that this need not be representative as the more valuable coins may well have been retrieved at the time of the temple's demolition.

All the above material bears similarities with that from other votive deposits and the apparently deliberate bent

Plate 14: Obverse and reverse of British 'D' type 'Cheriton' Gold staters from Portchester and Horndean.

and broken nature of the objects also indicates its nature as votive.

The faunal remains found are totally atypical of domestic Iron Age sites in that they contain no bovid but large quantities of sheep, goat and pig. This may eventually give some indication of the deity being worshipped on the site.

Fragments of human remains of an adult male were also found but the significance of their presence is difficult to assess.

The pottery from the site is basically of the saucepan pot continuum, with a predominance of everted and small bead rims from the central pit. The adjacent slot and the entrance post holes contained later Southern Atrebatic wheel thrown pottery. The Iron Age shrine would seem to have been constructed in possibly the mid-first century BC and abandoned and demolished in the mid-first century AD. Roman pottery in the outer ditch would suggest that this at least was still open after the Roman occupation.

Simple exchange and barter has doubtless existed from earliest times but is not necessarily recognisable in the archaeological record. It is not until items are made specifically for trade purposes that the archaeologist is on safer ground. There is little doubt that the currency bars of the late Iron Age are such items. These fall into four different types: sword shaped, spit shaped, plough shaped and bay leaf shaped. The former is the most common and examples have been found on the Iron Age shrine site on Hayling Island. It is likely that the iron content provided the exchange value. They could either continue to be exchanged, be hoarded and many have been found in hoards or converted into implements and weapons. Far more convenient was actual coinage which first appeared in Britain perhaps as early as 150 BC. This initial coinage was of Gallo-Belgic manufacture and consisted of several types which may be seen as an indication of the movement and settlement of incomers into Britain. It was not long before British derivatives of the Gallo-Belgic originals were being produced. The Gallo-Belgic staters were themselves copied from the stater of Philip II of Macedon which bore on the obverse the laureate head of Apollo and on the reverse a manned chariot pulled by a pair of horses. This had already become very degenerate on the Gallo-Belgic coins and although certain of the original elements remained they were barely recognisable as the same design. One of the British copies, the British 'D' type (Pl. 14) has great importance in this areas as four of the five known examples come from within a ten mile radius of Portsmouth.[86] The exception was found at Cheriton near Winchester and as this was the first to be found the British 'D' became more commonly known as the Cheriton type. The staters are made from a mixture of gold, silver and bronze and have a dull gold appearance. All that remains of the head of Apollo on the obverse are two hollow crescents representing degenerate curls. On the reverse the horses are reduced to four vertical dumb-bell shapes which is all that remains of the horses legs.

Of the 'D' type staters found locally two came from the hill slopes above Portchester (97) where they were loosely associated, with other finds including a British 'Qc' type gold quarter stater. The latter bore on its reverse a more recognisable triple tailed horse above a hollow star which is ultimately devolved from the chariot wheel. It is likely that these three coins represent the remains of a ploughed out hoard.

A third British 'D' type stater was found at Horndean (98) in close proximity to the 'Causeway' Late Iron Age site mentioned earlier. Of the fourth little more can be said than that it was purchased in a Portsmouth antique shop in the early 1930s when it was stated to have been found locally. Although all five examples are superficially very similar nevertheless there are minute differences between some of them which indicates that different dies were used

in their manufacture. There can be no doubt that these coins were manufactured and used by a local tribal group from perhaps 80 BC onwards but as they have all been found outside an archaeological context it is not possible to say anything more positive about their social or cultural significance.

It was the British 'Q' bearing the triple tailed horse that eventually bore the first incription in Britain, 'COMMIOS' and undoubtedly referred to the Commius who, as king of the Atrebates in Gaul, was sent to Britain by Julius Caesar in 55 BC to try to persuade the Britains to submit to Roman authority. By 53 BC however, he had changed sides and eventually sought refuge in Britain with other members of the Atrebates who had also fled from the Romans. Although no inscribed coins of Commius are recorded from the Portsmouth area those of his sons are, with a gold stater of Tincommius from Fareham (99), a gold stater of Verica from Portsmouth and several from the Hayling Island Iron Age Shrine.

A late Iron Age hoard is recorded as having been found in Portsmouth in 1830[87] but there is no published record of its contents. However, the British Museum holds in its collection nine coins which came from Portsmouth in 1830 and are probably part of this hoard. This includes a Durotrigian silver coin, two inscribed Icenian coins, one marked ED and the other ECEN and four Armorican Billon coins.

With the appearance of names on coins the pre-historic period draws to a close. AD 43 saw the Claudian invasion and the absorbtion of Britain into the Roman Empire with the written records that this implied.

Conclusion

Here then we have a summary of the available evidence relating to the activities of early man in the Portsmouth Area up to the Claudian Invasion. Inevitably it is nothing like a complete picture. It can be compared to a jigsaw puzzle with the vast majority of the pieces missing. Many of the pieces have been irrevocably destroyed by subsequent human activity, from Neolithic farming to twentieth-century development. Some pieces still wait to be found either by accident or by planned archaeological excavation. When they are found they may not initially seem to fit and often their relevance may only be seen when compared with the overall British or even European pattern. These new pieces may well help to change the overall pattern. But what is this jigsaw puzzle to tell us? The picture on the puzzle is one that shows us how things began and developed, how man lived, what he ate, what he believed in, how he died. It is the roots of history, our distant ancestry. However, our prehistoric heritage is a finite and wasting asset. It is being destroyed at an ever-increasing rate. It will have been apparent from this paper that the majority of the excavations referred to were rescue excavations on sites doomed to destruction. Are we to go down in history as the generation that destroyed its past? We must ensure that something is preserved for posterity and that that which it is not possible to preserve is recorded before it is gone forever.

NOTE ON THE AUTHOR

David Rudkin was born in Old Woodhouse, Leicestershire and spent his early life in the East Midlands. After leaving school he became a Mechanical Engineering draughtsman. During this time he began to develop an increasingly active interest in archaeology and in 1968 he went to Sheffield University to read Archaeology and Prehistory. On graduation he went on to the Department of Museum studies at Leicester University to take the Postgraduate Diploma in Museum studies. From 1972 to 1979 he was Keeper of Archaeology for Portsmouth City Museums where he undertook numerous excavations in the city and surrounding area. It was at this time that the present paper was written. He is at present Director of the Fishbourne Roman Palace & Museum.

REFERENCES

[1] Many of the objects mentioned in the text are on public display in Southsea Castle Museum. Portsmouth City Museums hold history files on many of the finds and excavations mentioned where, as yet, no report has been published.

[2] Roe D., 1968, 'British Lower and Middle Palaeolithic Handaxe Groups', *Proceedings of the Prehistoric Society,* vol. xxxiv, pp.1–82.

[3] Draper C., 1951, 'Stone Industries from Rainbow Bar, Hants', *Archaeological News Letter,* vol. iii, no. 9, pp.147–9.

[4] Warren S., Hazzaldine -, 1951, 'The Artefacts of Rainbow Bar', *A.N.L.,* vol. iv, no.1, p. 3.

[5] Mellars P., 1974, 'The Palaeolithic and Mesolithic' in Renfrew C., (ed) *British Prehistory,* London, pp. 41–99.

[6] Ap Simon A. and Gamble C., Forthcoming.

[7] Bordes F., 1968, *The Old Stone Age,* London.

[8] Draper C., 1962, 'Upper Palaeolithic type flints from Long Island, Langstone Harbour, Portsmouth', *Proceedings of the Hampshire Field Club,* vol. xxii, pp. 105–6.

[9] Mace A., 1959, 'An Upper Palaeolithic open site at Hengistbury Head, Christchurch, Hants', *P.P.S.* vol. xxv, pp. 233–59.

[10] Draper C., Personal communication.

[11] Wymer J. J., (ed), 1977, 'Gazeteer of Mesolithic sites in England and Wales', *Council for British Archaeology Research Report,* no. 20.

[12] Draper C., 1953, 'Further Mesolithic sites in South Hampshire', *Archaeological News Letter,* vol. iv, no. 12, p. 193.

[13] Mellars P., 1974, *op. cit.* p. 88.

[14] Jacobi R., 1978, 'The Mesolithic of Sussex' in Drewitt P. C., (ed) *The Archaeology of Sussex up to AD 1500,* CBA Research Report, no. xxix, p. 21.

[15] Draper C., Personal communication. Although recently it has been suggested that it may be Neolithic.

[16] Draper C., 1953, *op. cit.*

[17] Draper C., 1968, 'Mesolithic Distribution in South-East Hampshire, *P.H.F.C.,* vol. xxiii, pp. 110–19.

[18] Draper C., 1968, *op. cit.*

[19] Draper C., 1968, *op. cit.*

[20] Clark J. G. D., 1932, *The Mesolithic Age in Britain,* Cambridge.

[21] Bradley R. and Lewis E., 1974, 'A Mesolithic Site at Wakefords Copse, Havant', *Rescue Archaeology in Hampshire,* no. ii, pp. 5–18.

[22] Hughes M. F., and Ap Simon A. M., 1977, 'A Mesolithic flint workings site on the South Coast Motorway (M27) near Fort Wallington, Fareham, Hants 1972', *P.H.F.C.,* vol. xxxiv, pp. 23–36.

[23] Smith I. F., 1974, 'The Neolithic', in Renfrew C. (ed.) *British Prehistory,* London, p. 130.

[24] Campbell Smith W., 1963, 'Jade Axes from Sites in the British Isles', *P.P.S.,* vol. xxix, pp. 160–61.

[25] Ashbee P., 1957, 'A "single-piece" flint sickle from Titchfield Haven', *P.H.F.C.,* vol. xxix, pp. 280–2.

[26] Smith I. F., 1974, *op. cit.* p. 107.

[27] Bradley R. and Lewis C., 1974, *op. cit.*

[28] Rudkin D. J., Forthcoming 'Excavation of a Neolithic Long Barrow and Anglo Saxon Cemetery at Bevis' Grave, Bedhampton'.

[29] Ashbee P., 1957a, 'The Great Barrow at Bishops Waltham, Hants', *P.P.S.,* vol. xxiii, pp. 137–66.

[30] Hughes M., 1978, 'Late Neolithic Grooved Ware from Wallington, Fareham', *P.H.F.C.,* vol. xxxiv, p. 79.

[31] Rudkin D. J., *op. cit.*

[32] Bradley R. and Lewis E., 1969, 'Excavations at the George Inn, Portsdown', *P.H.F.C.,* vol. xxv, pp. 27–50.

[33] Piggott S., 1930, 'Butser Hill', *Antiquity,* vol. iv, pp. 87–200.

[34] Cooke S. H., n.d. *Tales of Ancient Wessex,* Portsmouth, pp. 6–12.

[35] Fasham P. J., 1979, 'The excavation of a triple barrow in Micheldever Wood, Hants', *P.H.F.C.,* vol. xxxv, pp. 5–40.

[36] Drewett P., 1975, 'The excavation of an Oval Burial Mound of the third Millenium BC, at Alfriston, E. Sussex, 1974', *P.P.S.,* vol. xli, p. 138.

[37] Clarke D. L., 1970, *Beaker Pottery of Great Britain and Ireland,* Cambridge, pp. 292–483.

[38] Ashbee P., 1957a, *op. cit.*

[39] Corney A., *et. al.,* 1969, 'A Prehistoric and Anglo-Saxon burial ground, Ports Down, Portsmouth', *P.H.F.C.,* vol. xxiv, pp. 20–41.

[40] Corney A., *et. al.,* 1969, *op. cit.*

[41] Rudkin D. J., Forthcoming, 'Excavations at Southwick Hill Cross Roads, Ports Down, Portsmouth'.

[42] Piggott S., 1938, 'The Early Bronze Age in Wessex', *P.P.S.,* vol. iv, pp. 69–77.

[43] Grinsell L. V., 1939, 'Hampshire Barrows', *P.H.F.C.,* vol. xiv, p. 361.

[44] Roe F. E. S., 1966, 'The Battle Axe Series in Britain', *P.P.S.,* vol. xxiii, p. 234.

[45] Cunliffe B., 1970, 'A Bronze Age Settlement at Chalton, Hants (Site 78)', *The Antiquaries' Journal,* vol. 1, pp. 1–13.

[46] Lewis E. and Walker G., 1977, 'A Middle Bronze Age Settlement site at Westbury, West Meon, Hants', *P.H.F.C.,* vol. xxxiii, pp. 39–44.

[47] Rowlands M. J., 1976, 'The Organisation of Middle Bronze Age Metal Working', *British Archaeological Reports 31,* vol. ii, p. 239.

[48] Crawford O. G. S. and Wheeler R. M., 1921, 'The Lynn Fawr and other hoards of the Bronze Age', *Archaeologia,* vol. lxxi, p. 139.

[49] Rowlands M. J., 1976, *op. cit.* p. 239.

[50] Rowlands M. J., 1976, *op. cit.* p. 243.

[51] Rowlands M. J., 1976, *op. cit.* p. 95.

[52] Rowlands M. J., 1971, 'The Archaeological Interpretation of Prehistoric metal working', *World Archaeology,* vol, iii, pp. 210–24.

[53] Rowlands M. J., 1976, *op. cit.* p. 366.

[54] Rowlands M. J., 1976 *op. cit.* p. 384.

[55] Rowlands M. J., 1976, *op. cit.* pp. 94–5.

[56] Selkirk A. and Selkirk W., (eds.) 1979, 'The Later Bronze Age revives', *Current Archaeology,* vol. vi, p. 169.

[57] Parker A., 1945, 'Recent Discoveries at Warsash', *P.H.F.C.,* vol. xvi, p. 191.

[58] Lewis E., 1971, 'Bronze Age, Hampshire, Portsmouth', *Archaeological Review for 1971,* no. 6, p.19.

[59] Lewis E., 1971, 'Bronze Age, Hampshire, Portchester', *Archaeological Review for 1971,* no. 6, p. 19.

[60] Nicholls J., 1976, 'M27 Motorway, Downend Road, Fareham', *South Hampshire Archaeological Rescue Group News Letter,* no. 6, p. 4.

[61] Lewis E., 1971, 'Bronze Age, Hampshire, Gosport', *Archaeological Review for 1971,* no. 6, p. 19.

[62] Selkirk A. and Selkirk W., (eds.) 1979, *op. cit.*

[63] Hooper B., 1968, 'Bronze Age, Hampshire, Portsmouth', *Archaeological Review for 1968,* no. 3, p. 9.

[64] Knocker G. M., 1956, 'Early Burials and an Anglo-Saxon Cemetery at Snell's Corner near Horndean, Hants', *P.H.F.C.,* vol. xix, pp. 117–70.

[65] Cunliffe B., 1976, 'Two Pre Roman Iron Age Sites at Chalton, Hants', in *Iron Age Sites in Central Southern England,* CBA Research Report no. 16, pp. 30–48.

[66] Bradley R. and Lewis E., 1969, *op. cit.*
[67] Hughes M., 'M27 South Coast Motorway Rescue Excavations of an Iron Age site at Wallington Military Road, Fareham, 1972', *R.A.H.*, vol. xii, pp. 31–96.
[68] Rudkin D. J., Forthcoming, 'Excavations at Southwick Hill Crossroads, Ports Down, Portsmouth'.
[69] Rudkin D. J., Forthcoming, 'Excavations of an Iron Age Site at Clanfield Reservoir, Hants'.
[70] Powell T. G. E., 1948, 'The Late Bronze Age Hoard from Welby, Leics', *Archaeological Journal,* vol. cv, pp. 27–40.
[71] Cunliffe B., 1976, *op. cit.*
[72] Cunliffe B., 1961, 'Report on a Belgic and Roman Site at the Causeway, Horndean (1959)', *P.H.F.C.,* vol. xxii, pp. 8–24.
[73] Hooper B., 1969, Appendix to Bradley R., 'Excavations on Ports Down Hill 1963–5', *P.H.F.C.,* vol. xxiv, p. 58.
[74] Lewis E., Personal communication.
[75] Hughes M., 1973, 'Excavations at Brownwich Farm, Titchfield, 1971', *R.A.H.,* vol, i, pp. 5–28.
[76] Bradley R. and Hooper B., 1975, 'Recent Discoveries from Portsmouth and Langstone Harbours: Mesolithic to Iron Age', *P.H.F.C.,* vol. xxx, pp. 24–7.
[77] Lewis E., 1971, 'Pre Roman Iron Age, Hampshire, Havant', *Archaeological Review for 1971,* no. 6, p. 22.
[78] Fox C. F., 1935, 'Salt Works at Hook, Warsash, Hants', *P.H.F.C.,* vol. xiii, pp. 105–9.
[79] Hawkes J., 1940, 'The Excavations at Balksbury 1939', *P.H.F.C.,* vol. xiv, pp. 338–45.
[80] Bradley R., 1971, 'Economic Change in the Growth of Early Hill Forts', in Jesson M. and Hill D. (eds.) *The Iron Age and its Hill Forts,* pp. 71–83.
[81] Bradley R. and Fulford M. G., 1976, 'Excavations at Tournerbury, Hayling Island, 1959–1971', *P.H.F.C.,* vol. xxxii, pp. 63–9.
[82] Bradley R., 1969, 'Excavations on Portsdown Hill 1963–65', *P.H.F.C.,* vol. xxiv, pp. 42–58.
[83] Downey R., King A. and Soffe G., 1979, 'The Hayling Island Temple', *Third Interim report on the Excavation of the Iron Age and Roman Temple 1976–78,* London.
[84] Nash D., 1979, 'Celtic Coins' in Downey R., King A. and Soffe G., 1979, *op. cit.* p. 8.
[85] Cunliffe B., 1979, *Iron Age Communities in Britain,* London. p. 272.
[86] Allen D. F., 1958, 'The Origins of Coinage in Britain: A Reappraisal', in S. S. Frere (ed.) *Problems of the Iron Age in Southern Britain,* pp. 97–308.
[87] Allen D. F., 1958, *op. cit.* pp. 293–6.

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CITY OF PORTSMOUTH PUBLICATIONS

The Portsmouth Papers—Titles available

1. *Portchester* by Professor Barry Cuncliffe, 1967 (Illus.) 50p. *Reprinted* 1970.
2. *History of the Police of Portsmouth* by James Cramer, 1967 (Illus.) 50p.
3. *'Palmerston's Folly': The Portsdown and Spithead Forts* by Professor A. Temple Patterson, 1968 (Illus.) 50p. *Reprinted* 1970 and 1974.
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5. *The Naval Mutiny at Spithead 1797* by Professor A. Temple Patterson, 1968 (Illus.) 50p. *Reprinted* 1978.
6. *Portsmouth Railways* by Edwin Course, BSC (ECON), PHD AMINSTT, 1969 (Illus.) 50p. *Reprinted* 1972.
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